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ABSTRACT

This report describes an expanded and revised version of the Economic Research Service's 1979 classification of nonmetro counties, commonly called the ERS typology. The classification has been widely used by researchers, policy analysts, and public officials as a source of information about the economic and social diversity characterizing rural America. The revised typology classifies counties designated as nonmetro in 1993 into one of six nonoverlapping types that indicate the county's primary economic activity: farming-dependent, mining-dependent, manufacturing-dependent, government-dependent, services-dependent, and nonspecialized. The revised typology also classifies counties according to five other overlapping types with special relevance for rural policy: retirement-destination, federal lands, commuting, persistent poverty, and transfers-dependent. This analysis focuses on the distributions of nonmetro counties across the types. Sections on each county type provide brief economic and sociodemographic profiles, including U.S. maps showing county locations, graphs tracing job growth in each county type versus national growth, and data tables. Appendices describe data sources and procedures and include 18 data tables on selected statistics by county type, including demographic characteristics, high school graduates and dropouts, income, employment, and poverty. Contains 21 references. (Author/SV)

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United States Department of Agriculture

Economic Research Service

Rural Development Research Report Number 89

The Revised ERS County Typology

An Overview

Peggy J. Cook
Karen L. Mizer

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COUNTIES

FARMING-DEPENDENT ◆ MINING-DEPENDENT
MANUFACTURING-DEPENDENT ◆ SERVICES-
DEPENDENT ◆ GOVERNMENT-DEPENDENT
RETIREMENT-DESTINATION ◆ COMMUTING
FEDERAL LANDS ◆ TRANSFERS-DEPENDENT
◆◆◆◆◆◆◆◆ PERSISTENT POVERTY ◆ NONSPECIALIZED ◆

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Abstract

This report describes an expanded and revised version of the Economic Research Service's 1979 classification of nonmetro counties, commonly called the ERS typology. The classification has been widely used by researchers, policy analysts, and public officials as a source of information about the economic and social diversity characterizing rural America. The revised typology classifies counties designated as nonmetro in 1993 into one of six nonoverlapping types that indicate the county's primary economic activity: farming-dependent, mining-dependent, manufacturing-dependent, government-dependent, services-dependent, and nonspecialized. The revised typology also classifies counties according to five other overlapping types with special relevancy for rural policy: retirement-destination, Federal lands, commuting, persistent poverty, and transfers-dependent. This analysis focuses on the distributions of nonmetro counties across the types and provides brief economic and sociodemographic profiles for each type. Particular attention is given to population and economic changes during the 1980's.

Keywords: economic base, typology, county types, rural, farming, mining, manufacturing, government, services, nonspecialized, retirement-destination, Federal lands, commuting, persistent poverty, transfer payments, rural development.

Acknowledgments

This report reflects the efforts of the Economic Research Service's typology research team who collectively developed a rationale and design for revising the ERS county typology. Members of the working group were G. Andrew Bernat, Calvin L. Beale, Peggy J. Cook, Thomas F. Hady, Alex Majchrowicz, Karen L. Mizer, and Peter Stenberg. Other team members providing input and general oversight of the work were Thomas A. Carlin, Kenneth L. Deavers, Linda M. Ghelfi, and Sara M. Mazie. The authors, who are respectively a senior sociologist with the Rural Economy Division and a computer programmer/analyst, Information Services Division, gratefully acknowledge the contributions of all their colleagues. Special thanks go to Calvin Beale, Richard Long, Linda Ghelfi, and Sara Mazie who provided insightful and helpful reviewers' comments and to Lindsay Mann who served as technical editor for the manuscript.

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Contents

Preface 1

Highlights: ERS Typology Depicts Rural Diversity 2

Introduction: Revising the ERS Typology 4

Economic Type 6
- Farming-Dependent Counties 6
- Mining-Dependent Counties 8
- Manufacturing-Dependent Counties 10
- Government-Dependent Counties 12
- Services-Dependent Counties 14
- Nonspecialized Counties 16

Policy Type 18
- Retirement-Destination Counties 18
- Federal Lands Counties 20
- Commuting Counties 22
- Persistent Poverty Counties 24
- Transfers-Dependent Counties 26

References 28

Appendix: Data, Definitions, and Procedures 29

Appendix Tables 31

Preface

The Economic Research Service's (ERS) classification of nonmetro counties has been widely used by researchers, policy analysts, and public officials as a source of information about the economic and social diversity characterizing rural America. The classification system, or ERS typology as it is commonly known, reduces the wide range of economic and social diversity existing in nonmetro counties into a few important themes relevant to rural policymaking. Through the typology, ERS provides users with a way to geographically identify groups of nonmetro counties sharing important economic and policy-relevant traits and with information about economic and socio-demographic conditions that differentiate the county groups.

The original typology summarized the diversity of rural economic and social conditions among nonmetro counties in 1979 as seven major overlapping themes or types. Four county types reflected dependence on a particular economic specialization: farming, manufacturing, mining, and government. Three county types--persistent poverty, Federal lands, and retirement-destination--reflected other special policy-relevant themes. A residual type, labeled unclassified counties, included counties that met the criteria for none of the types. An update of the typology, using the same concepts and definitions updated to 1986 (where possible), was created to show how the economic and social structure of nonmetro areas changed from 1979 to 1986. Citations of the major reports and articles covering the 1979 typology and the 1986 update appear in the references section.

From the project's onset, the team of ERS typology analysts acknowledged a need to review and revise the typology in keeping with changing times. The 1979 typology depicted rural social and economic conditions after a decade of relative prosperity and economic growth for rural America, but at a time when rural growth trends were showing signs of slowing. The 1986 update focused on change between 1979 and 1986, a period with two recessions and a severe farm crisis followed by slow rural recovery. A substantial increase in the number of unclassified counties in the 1986 update emphasized the need to consider both conceptual and methodological changes in the typology that would maximize its utility during the 1990's decade.

As a result, the third version of the ERS typology, which is presented in this report, has been revised and expanded. The goals of this report are to discuss those changes made to the ERS typology, the rationale for these changes, and to present a brief overview for each of the types in the revised typology.

Peggy J. Cook and Karen L. Mizer

ERS Typology Depicts Rural Diversity

A revised and expanded version of the ERS typology provides an improved vehicle for communicating policy-relevant information to rural policymakers.

Counties in rural America can be classified into distinct economic types and overlapping policy types. This report describes a revised and expanded version of the Economic Research Service's (ERS) county classification system, commonly called the ERS typology. Earlier typologies have been widely used as a vehicle to reflect the extremely diverse economic and social structure of rural America. The typology is based on the assumption that knowledge and understanding of different types of rural economies and their distinctive economic and sociodemographic profiles can aid rural policymaking.

The analysis for the revised typology identifies 11 types of nonmetropolitan (nonmetro) counties according to either the primary economic activity of different county economies or to other themes of special policy significance. Descriptive profiles of the county types are employed to show the differences between the types in geographic and population characteristics, levels of economic well-being, and the patterns of economic and population change during the 1980's.

Counties designated as nonmetro in 1993 are classified into one of six nonoverlapping economic types. These types along with highlights of their distinctive profiles are as follows:

- **Farming-dependent counties** (556 counties) were remotely located, predominantly rural and sparsely populated. These counties are geographically concentrated in the Midwest. Population declined 11 percent through outmigration during the 1980's. Because of high outmigration of younger adults, the ratio of dependent populations to working age adults was extremely high. The economic base in these counties declined throughout the 1980's. As a group, they lost 111,000 farming jobs during 1979-89.

- **Mining-dependent counties** (146) accounted for nearly half of all nonmetro mining jobs in 1989. As a group, they included counties with distinct specializations in different types of mining activities, including coal, gas and oil, and metals. Most counties are in the South or West. Like farming counties, mining counties lost population through outmigration and experienced economic decline during the 1980's. The number of mining jobs maintained a downward spiral during the decade, reaching a 1989 low of 72 percent of the 1979 figure.

- **Manufacturing-dependent counties** (506) represented 31 percent of nonmetro population and 55 percent of nonmetro manufacturing jobs. Compared with the other county types, manufacturing counties exhibited a more urban orientation, were more often located contiguous to a metro area, and were more densely populated. Three-fifths of the counties are in the Southeast. The economies of manufacturing counties grew slightly during the 1980's, mainly because of gains in the latter years of the decade. Manufacturing jobs increased most in remote counties with no urban population.

- **Government-dependent counties** (244) specialized in Federal, State, and local government activities. About 75 percent of earnings from government jobs came from State and local jobs and about 25 percent from Federal jobs. These counties are scattered across the Nation. Government counties' population in all regions grew during the 1980's. Their economies grew also with an overall gain of 433,000 new jobs. However, compared with all-nonmetro counties, the levels of economic well-being were lower.

- **Services-dependent counties** (323) reflect a dominant national trend of growth in service sector jobs, which now permeate most rural economies. These counties, like government counties, are fairly evenly distributed across the Nation with a slightly higher representation in the West. Depending on their degree of urbanization and proximity to a metro area, services counties are likely to perform different economic functions such as centers for trade and services, consumer service centers for residential areas, and centers of specialized services like recreation. Services counties' economies grew during the 1980's with a 24-percent growth in earnings from services activities.

- **Nonspecialized counties** (484) include counties the economies of which did not qualify for one of the economic specialization types, although a few of these counties may actually be specialized in economic activities such as construction, agricultural

services, or forestry and fisheries. These counties, in 44 of the 50 States, dot the national landscape. The large majority are located in the South. Two-thirds experienced job growth during the 1980's. County economies likely reflect two general kinds of economic performance in the 1980's: counties with strong economies from their function as service centers for spillover residential sites from adjoining metro counties, and counties with weak economies caused by shifts away from specializations in farming or manufacturing or by having a small economic base and/or high concentrations of poverty.

Counties are also classified into five overlapping policy types:

- **Retirement-destination counties** (190) had a 15-percent or greater increase in population aged 60 and above from inmovement of people between 1980 and 1990. Over 80 percent of these counties are in the South or West, prevalent most often in traditional retirement areas of Florida, the Southwest, or in other lake, reservoir, coastal, or scenic upland areas. Many counties also serve as recreational or resort sites. As a result, they attract younger populations as well as retirees with population growth in all age categories during the 1980's. Along with population growth, retirement counties had unusually high growth in earnings and jobs--the highest of any of the types. Sixty percent of these counties had job growth faster than the national average.

- **Federal lands counties** (270) had land areas dominated by Federal ownership. Seventy-six percent of these counties are in Western States. Counties in the type had larger land areas and were more sparsely populated than all-nonmetro counties. On average, population in the counties grew faster during the 1980's than in all-nonmetro counties. Nearly 70 percent of jobs in the average Federal lands county were in the services or government sectors, reflecting the recreational use and land management functions of the group. Strong growth in service sector jobs during the 1980's probably contributed to higher family income (over $1,900 higher) than in all-nonmetro counties.

- **Commuting counties** (381) had economies shaped, in part, by workers commuting to jobs in other counties--at least 40 percent of workers in 1990. Over 6 million nonmetro people live in the commuting counties. About 65 percent of commuting counties are in the South, and 28 percent in the Midwest. Because of the southern geographic orientation, counties have much smaller land areas and are more apt to adjoin a metro area than all-nonmetro counties. Population in the counties includes somewhat higher shares of economically at-risk people. Because of the outflow of workers to other counties, the level of economic activity within the local economies was less than that in all-nonmetro counties. However, the economic picture for commuting counties changes when the jobs and earnings for commuting workers are taken into account.

- **Persistent poverty counties** (535) had poverty rates of 20 percent or higher in 1960, 1970, 1980, and 1990. These counties accounted for 19 percent of nonmetro people and 32 percent of nonmetro poor in 1990. Nearly 83 percent of poverty counties are in the South. They are smaller and have less urban population than most other county types. A main distinguishing feature of the poverty counties is a disproportionate number of economically at-risk people including minorities, female-headed households, high school dropouts, and disabled persons. Incomes that were considerably lower and unemployment that was considerably higher than in all-nonmetro counties suggest that the economy plays a part in providing insufficient job opportunities.

- **Transfers-dependent counties** (381) had economies heavily based on unearned income from government transfer payments, including social security, unemployment insurance, medicare, medicaid, food stamps, government pensions, and welfare benefits. Regionally concentrated in parts of the South and Midwest, the large majority are in Southern States. They are more apt to be remote from metro areas and to be sparsely populated. Three-fifths of transfers-dependent counties are also in the persistent poverty category. Because of the overlap, transfers-dependent counties exhibit many of the same demographic and economic traits attributed to the persistent poverty counties. However, transfers-dependent counties include a larger share of elderly. The industrial mix of jobs in transfers-dependent counties generally resembles the mix for all-nonmetro counties; but, the pace of overall job growth was slower than the all-nonmetro pace.

Revising the ERS Typology

The revised typology reflects both conceptual and definitional changes to the earlier typologies.

This report describes an expanded and revised version of the Economic Research Service's (ERS) classification of nonmetro counties, commonly called the ERS county typology. The 1990 revised typology builds on the basic conceptual scheme of the original typology but incorporates both conceptual and definitional changes. The typology's design includes categories that represent the primary economic activity of county economies and categories that reflect other themes with special policy significance.

The revised typology classifies counties designated as nonmetro in 1993 (based on population and commuting data from the 1990 Census) into one of six mutually exclusive economic types. Four types were retained from the original typology: farming-dependent, manufacturing-dependent, mining-dependent, and government-dependent. A fifth type, services-dependent counties, was added in response to the growing proliferation of services jobs in the national economy. The sixth type, nonspecialized counties, includes those counties whose economies did not meet the criteria for any of the major economic specializations.

The revised typology also classifies nonmetro counties by each of five policy criteria. Three of the policy types--retirement-destination, Federal lands, and persistent poverty--were revised from the original typology. A commuting type was added to reflect county economies influenced by workers commuting to jobs in other counties, and a transfers-dependent type was added to identify county economies heavily reliant on income from government transfer payments.

In delineating the typology, the research team used essentially the same conceptual approach and data sources as in the earlier typologies. However, definitional and procedural changes were made to improve the clarity and usefulness of the typology. For the first time, the typology classifies nonmetro areas in Alaska and Hawaii. A major change was the establishment of mutually exclusive economic types, making the typology more useful for statistical analyses. Another change was the use of a poverty-based rather than a low per capita income-based definition of the persistent poverty category.

Using the definitions shown on the facing page, 2,259 of the 2,276 nonmetro counties were classified into one of the six economic types, and, as applicable, 1,197 counties were classified into one or more of the five policy types. Definitions for the economic types are based on 3-year measures. The results of the classification appear in the box below. Modified definitions were employed to classify 17 counties omitted from the economic types because of data suppression. Classifications for these 17 counties along with more detailed information about data sources and procedures used to operationalize the new typology are described in the appendix. Appendix tables report more detailed economic and sociodemographic information about the types. This information forms the basis for the separate descriptive profiles of each county type that follow.

Number of Counties in 1989 Typology

556 farming-dependent
146 mining-dependent
506 manufacturing-dependent
244 government-dependent
323 services-dependent
484 nonspecialized
190 retirement-destination
270 Federal lands
381 commuting
535 persistent poverty
381 transfers-dependent

Definitions

Economic types:

Farming-dependent--Farming contributed a weighted annual average of 20 percent or more of total labor and proprietor income over the 3 years from 1987 to 1989.

Mining-dependent--Mining contributed a weighted annual average of 15 percent or more of total labor and proprietor income over the 3 years from 1987 to 1989.

Manufacturing-dependent--Manufacturing contributed a weighted annual average of 30 percent or more of total labor and proprietor income over the 3 years from 1987 to 1989.

Government-dependent--Government activities contributed a weighted annual average of 25 percent or more of total labor and proprietor income over the 3 years from 1987 to 1989.

Services-dependent--Service activities (private and personal services, agricultural services, wholesale and retail trade, finance and insurance, transportation and public utilities) contributed a weighted annual average of 50 percent or more of total labor and proprietor income over the 3 years from 1987 to 1989.

Nonspecialized--Counties not classified as a specialized economic type over the 3 years from 1987 to 1989.

Policy types:

Retirement-destination--The population aged 60 years and over in 1990 increased by 15 percent or more during 1980-90 through inmovement of people.

Federal lands--Federally owned lands made up 30 percent or more of a county's land area in the year 1987.

Commuting--Workers aged 16 years and over commuting to jobs outside their county of residence were 40 percent or more of all the county's workers in 1990.

Persistent poverty--Persons with poverty-level income in the preceding year were 20 percent or more of total population in each of 4 years: 1960, 1970, 1980, 1990.

Transfers-dependent--Income from transfer payments (Federal, State, and local) contributed a weighted annual average of 25 percent or more of total personal income over the 3 years from 1987 to 1989.

Farming-Dependent Counties

Making up the most numerous county type, a majority of farming-dependent counties are located in the Midwest.

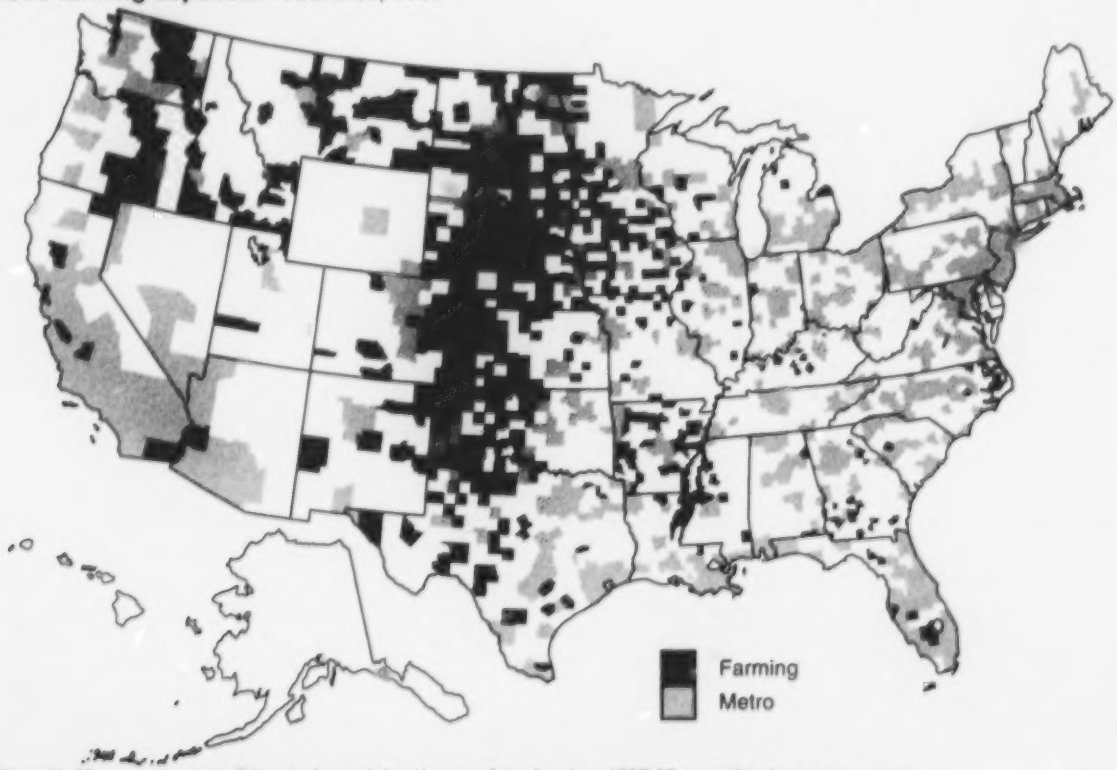
Farming continues to dominate the economies of many rural counties. Despite the continued long-term decline of farming as a principal source of income, the farming-dependent group, with 556 counties, was the largest of 11 county types. Earnings from farm production activities in these counties ranged from 20 to 89 percent of total labor and proprietors' income (earnings) during 1987-89, with an average farm earnings of 36 percent. Nearly 90 percent of these counties were also classified as farming-dependent in the 1979 typology. Manufacturing-dependent and persistent poverty are the only other types encompassing more than 500 counties.

Because the typology only classifies nonmetro counties, this type excludes metro counties that are high-value producers of agricultural products. Over a third of farms with high gross sales (over $500,000) in 1987 were located in metro counties. Even if they were nonmetro, however, these counties would not likely qualify as farming-dependent because their economies tend to be based on a variety of economic activities.

Well over a third of nonmetro farm earnings and about a fourth of nonmetro farm jobs were found in farming-dependent counties in 1989.

Farming-dependent counties are primarily concentrated in the Great Plains, stretching from North Dakota to the Texas Panhandle (fig. 1). Nearly 300 counties are in the Midwest, mainly on the western side of the region. Another 30 percent (172 counties) are in the South, clustered in the Plains areas of Oklahoma and Texas, the Mississippi Delta, and the nearby livestock/poultry Ozark-Ouachita

Figure 1
Nonmetro farming-dependent counties, 1989*



*Counties with 20 percent or more labor and proprietors' income from farming, 1987-89 annualized average.
Source: Rural Economy Division, Economic Research Service, USDA, using data from the Bureau of Economic Analysis.

Mountains, the traditional small farm interior-uplands area of Kentucky, and the coastal plain of Georgia. The remaining 92 counties are in the West, mostly in the northwestern States.

Farming counties accounted for 24 percent of all nonmetro counties, but only 9 percent of nonmetro population, reflecting the predominant sparse settlement and rural character of the counties and continuing outmigration (-11.0 percent) of population during the 1980's. Over two-thirds of the counties had no towns with over 2,500 population in 1990 (table 1). Average county population size was about 8,400 compared with 22,000 for all-nonmetro counties. For every 100 working-age adults, there were 87 residents in the dependent population (either ages 17 and under or 65 and over) in 1990. The farming counties had the highest dependency ratio of the 11 types. This underscores the ongoing outmigration of younger, working-age people. For example, between 1980 and 1990, farming counties lost over 17 percent of their population aged 18-34 years.

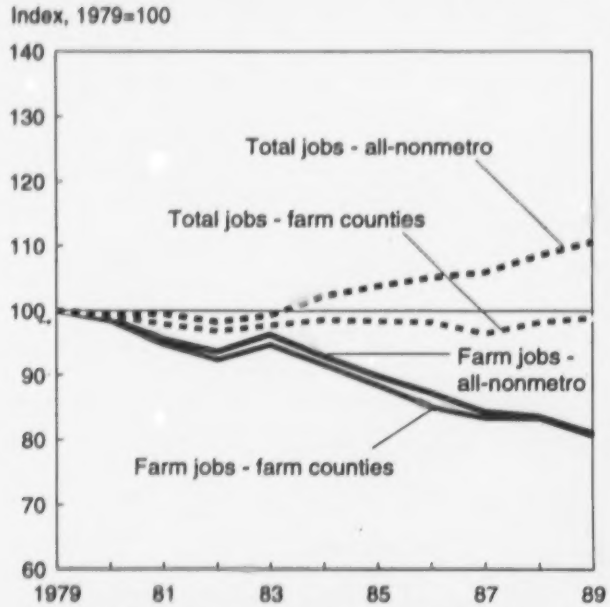
The economic base in the farming-dependent group declined throughout the 1980's. Both earnings and jobs dropped during the recessions of the early years. Farming counties, as a group, lost 111,000 farming jobs during 1979-89, with farm jobs declining in most years throughout the period (fig. 2). After the economic recovery began, farming counties were able to replace lost farm jobs with nonfarm jobs, but the gap in total job growth between farming counties and all-nonmetro counties widened because total jobs grew faster in all-nonmetro counties. After the recession, earnings from farming regained some ground, but still remained less than 95 percent of the 1979 figure.

Table 1--Farming-dependent counties: Selected characteristics

Item	Unit	Farming counties	All-nonmetro counties
Counties	*Number*	556	2,276
Population, 1990	*Thousands*	4,647	50,898
Totally rural, 1993[1,2]	*Percent*	66.7	34.0
Population density, 1990[3,4]	*Number*	11.8	36.3
Population change, 1980-90[4]	*Percent*	-6.9	.6
Per capita income, 1989[4]	*Dollars*	14,743	13,580
Earnings change, 1979-89:[5]			
Total earnings	*Percent*	-6.1	3.4
Farm earnings	*do.*	-6.5	-12.5

[1]No persons living in towns of 2,500 population or more.
[2]Percentage of counties in group. [3]Persons per square mile.
[4]Unweighted county averages. [5]Calculated from aggregated data.

Figure 2
Job growth in farming-dependent and all-nonmetro counties
With a steady decline in farm jobs, overall job growth in farming counties lagged that for all-nonmetro counties



Source: Rural Economy Division, ERS, USDA, using data from the Bureau of Economic Analysis.

Mining-Dependent Counties

Although the smallest of the economic types with only 146 counties, this type accounted for nearly half of nonmetro mining jobs.

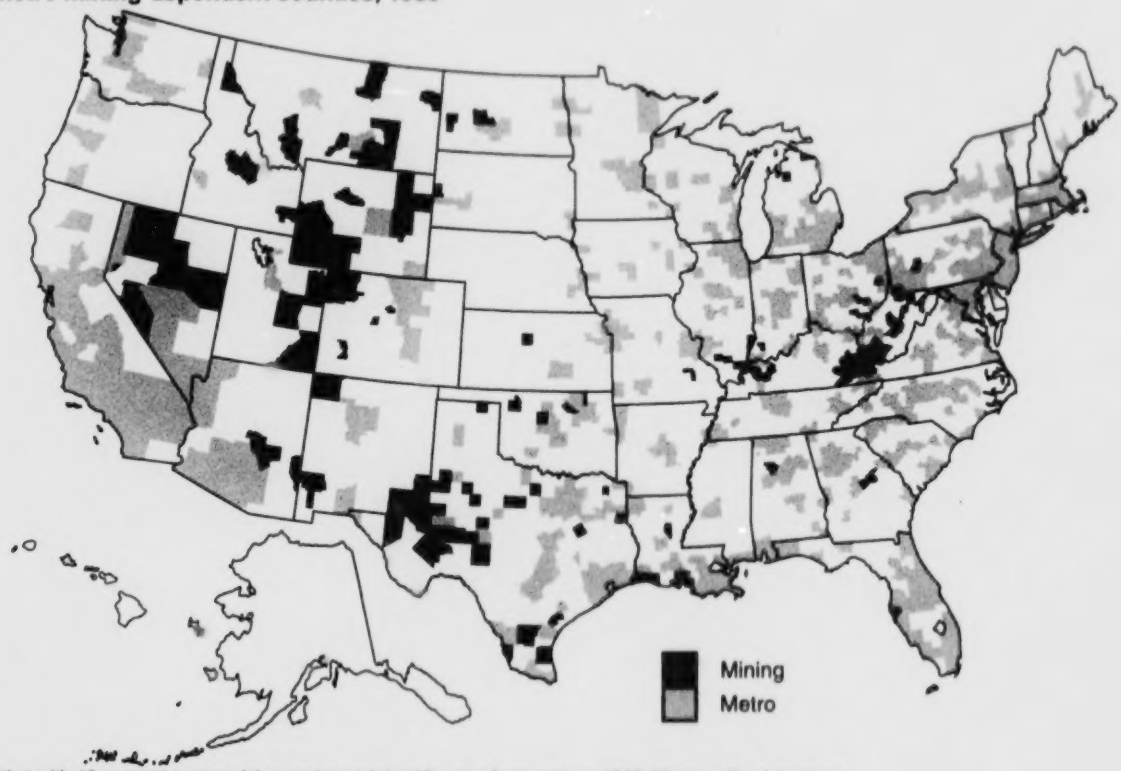
The 146 counties classified as mining-dependent accounted for nearly half of the 389,000 nonmetro mining jobs in 1989. County earnings from mining activities ranged from 15 to 79 percent of total earnings during the 3-year period 1987-89. Mining represented 29 percent of total earnings in the average mining county in 1989.

The counties in the mining category are quite heterogeneous because of distinct specializations in different types of mining activities. The group includes counties located in the coal-producing areas of Appalachia and the Midwest, the gas and oil-producing areas of Texas, Oklahoma, Louisana, and the Northern Plains States, and in the metal mining areas of the West (fig. 3). Over 50 percent of the counties are in the South, and an additional 30 percent in the West. Located at natural resources sites, most of the counties are remote from metro areas, although the need for workers has created an average county population twice that for farming counties.

Mining counties, irrespective of region, lost population through outmigration during the 1980's. Southern mining counties had the highest rate of outmigration. Mining counties had, on average, a higher share of Hispanic population and a higher unemployment rate than all-nonmetro counties.

The mining sector as a whole did not fare well during the 1980's. During 1981-85, domestic crude oil prices dropped nearly 30 percent; other energy prices also fell. Mining counties as a group experienced the greatest economic decline of all the economic types during the 1980's. The drop in mining earnings also pulled down total earnings (table 2). Beginning in

Figure 3
Nonmetro mining-dependent counties, 1989*



*Counties with 15 percent or more labor and proprietors' income from mining, 1987-89 annualized average.
Source: Rural Economy Division, Economic Research Service, USDA, using data from the Bureau of Economic Analysis.

1982, mining jobs maintained a downward spiral throughout the decade. By 1989, the number of mining jobs had reached a low of 72 percent of its 1979 figure (fig. 4). Improved productivity per worker also curtailed employment. Some growth in the services and government sectors lessened the decline in total jobs.

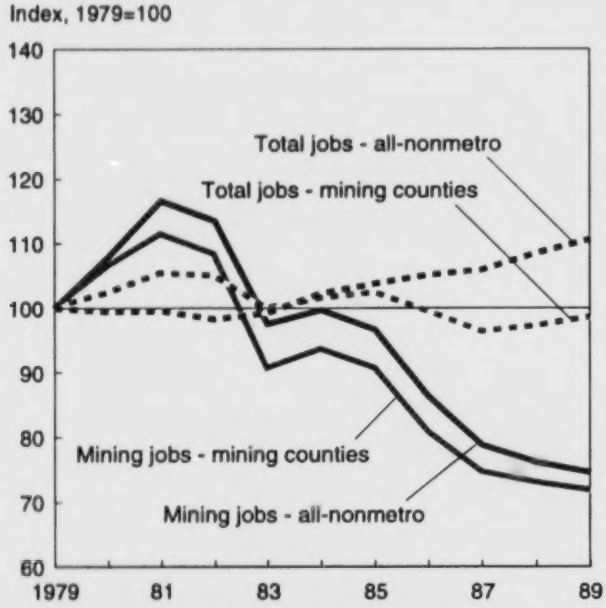
Counties in the group, however, did not share equally in the decline. While slightly under half of the counties had economies that performed poorly during the 1980's, over half of the counties gained in total jobs, and 13 percent had a job growth rate faster than the U. S. average. Even counties with job growth may face an uncertain future if solutions are not found to help them deal with recurring problems associated with the volatility of energy prices and with the inevitability of resource depletion, such as has happened in Appalachia.

Table 2--Mining-dependent counties: Selected characteristics

Item	Unit	Mining counties	All-nonmetro counties
Counties	*Number*	146	2,276
Population, 1990	*Thousands*	2,847	50,898
Totally rural, 1993[1,2]	*Percent*	33.6	34.0
Population density, 1990[3,4]	*Number*	31.8	36.3
Population change, 1980-90[4]	*Percent*	-.6	.6
Per capita income, 1989[4]	*Dollars*	13,081	13,580
Earnings change, 1979-89:[5]			
Total earnings	*Percent*	-16.0	3.4
Mining earnings	*do.*	-31.9	-36.9

[1]No persons living in towns of 2,500 population or more.
[2]Percentage of counties in group. [3]Persons per square mile.
[4]Unweighted county averages. [5]Calculated from aggregated data.

Figure 4
Job growth in mining-dependent and all-nonmetro counties
The dramatic decline in mining jobs after 1982 reflects falling energy prices, especially for domestic crude oil



Source: Rural Economy Division, ERS, USDA, using data from the Bureau of Economic Analysis.

Manufacturing-Dependent Counties

Manufacturing counties, compared with all-nonmetro counties, are likely to be more densely populated, urbanized, and adjacent to a metro area.

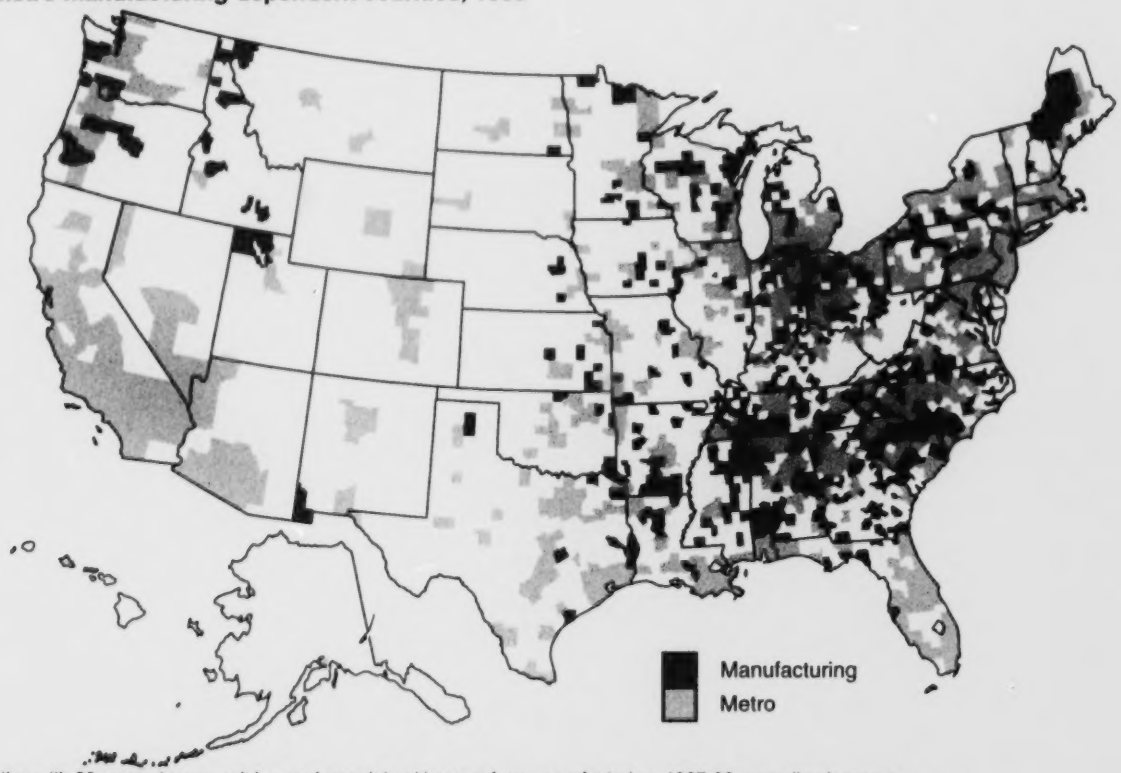
Manufacturing-dependent counties constituted the second most numerous of the economic types, trailing the farming group only slightly. (The manufacturing counties were the most numerous of the county types in the 1986 typology update.) The numerical prominence of manufacturing counties reflects a long-term trend of the emergence of manufacturing in nonmetro economies to replace farming as the primary economic activity.

The 506 manufacturing counties represented 22 percent of nonmetro counties and had 31 percent of nonmetro population and 2.3 million (55 percent) nonmetro manufacturing jobs. During 1987-89, average earnings from manufacturing ranged from 30 to 50 percent of total earnings in about 85 percent of the manufacturing counties. Manufacturing accounted for 50 to 82 percent of total earnings in the other 15 percent.

Sixty-one percent of manufacturing counties are concentrated in the Southeast. The North Central region of the Midwest accounts for another 29 percent, while the Northeast and West, mainly the northwestern counties, account for only 6 and 4 percent, respectively (fig. 5). Except for those counties in the Midwest, manufacturing counties usually gained population during the 1980's.

A distinctive feature of the manufacturing counties, relative to the other types, is a more urban orientation. Manufacturing counties were more likely to have larger shares of people living in towns of at least 2,500 inhabitants, to be contiguous to metro areas, and/or to be more densely populated. Over 80 percent

Figure 5
Nonmetro manufacturing-dependent counties, 1989*



*Counties with 30 percent or more labor and proprietors' income from manufacturing, 1987-89 annualized average.
Source: Rural Economy Division, Economic Research Service, USDA, using data from the Bureau of Economic Analysis.

of the counties had populations living in small and medium-sized towns, and nearly 60 percent of the counties were adjacent to a metro area. The average manufacturing county had a population of 31,162 compared with 22,363 for all-nonmetro counties; persons per square mile averaged 59.2 compared with 36.3 persons per square mile for all-nonmetro counties (table 3). One reason accounting for their population density is the relatively small size of land area in manufacturing counties; the average county consisted of 639 square miles compared with 1,256 square miles for all-nonmetro counties.

The economies of the manufacturing counties improved slightly during the 1980's, mainly because of gains made in the latter part of the decade (fig. 6). The improvement was partially due to gains in the trade/services sector where real earnings increased 15 percent and jobs grew 46 percent during 1979-89. Throughout most of the decade, manufacturing jobs slowly declined, then began to grow after 1987. As a result, manufacturing counties experienced a 1979-89 overall growth of 1.9 percent in manufacturing earnings and 2.8 percent in manufacturing jobs. Manufacturing jobs grew most in totally rural, nonadjacent counties with populations living only in small settlements or in open country areas.

Table 3--Manufacturing-dependent counties: Selected characteristics

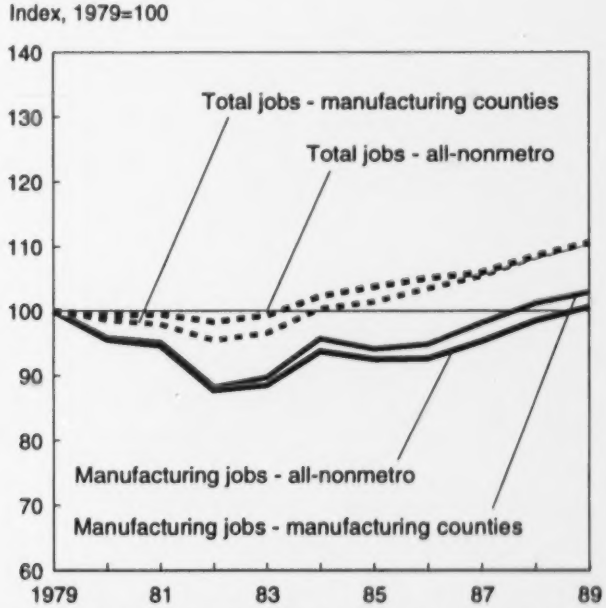
Item	Unit	Manu-facturing counties	All-nonmetro counties
Counties	*Number*	506	2,276
Population, 1990	*Thousands*	15,768	50,898
Urbanized, 1993[1,2]	*Percent*	82.1	66.0
Population density, 1990[3,4]	*Number*	59.2	36.3
Population change, 1980-90[4]	*Percent*	1.5	.6
Per capita income, 1989[4]	*Dollars*	13,081	13,580
Earnings change, 1979-89:[5]			
Total earnings	*Percent*	6.0	3.4
Manufacturing earnings	*do.*	1.9	-2.9

[1]Persons living in towns of 2,500 population or more. [2]Percentage of counties in group. [3]Persons per square mile. [4]Unweighted county averages. [5]Calculated from aggregated data.

Figure 6

Job growth in manufacturing-dependent and all-nonmetro counties

Manufacturing counties' economy improved in the latter part of the decade



Source: Rural Economy Division, ERS, USDA, using data from the Bureau of Economic Analysis.

Government-Dependent Counties

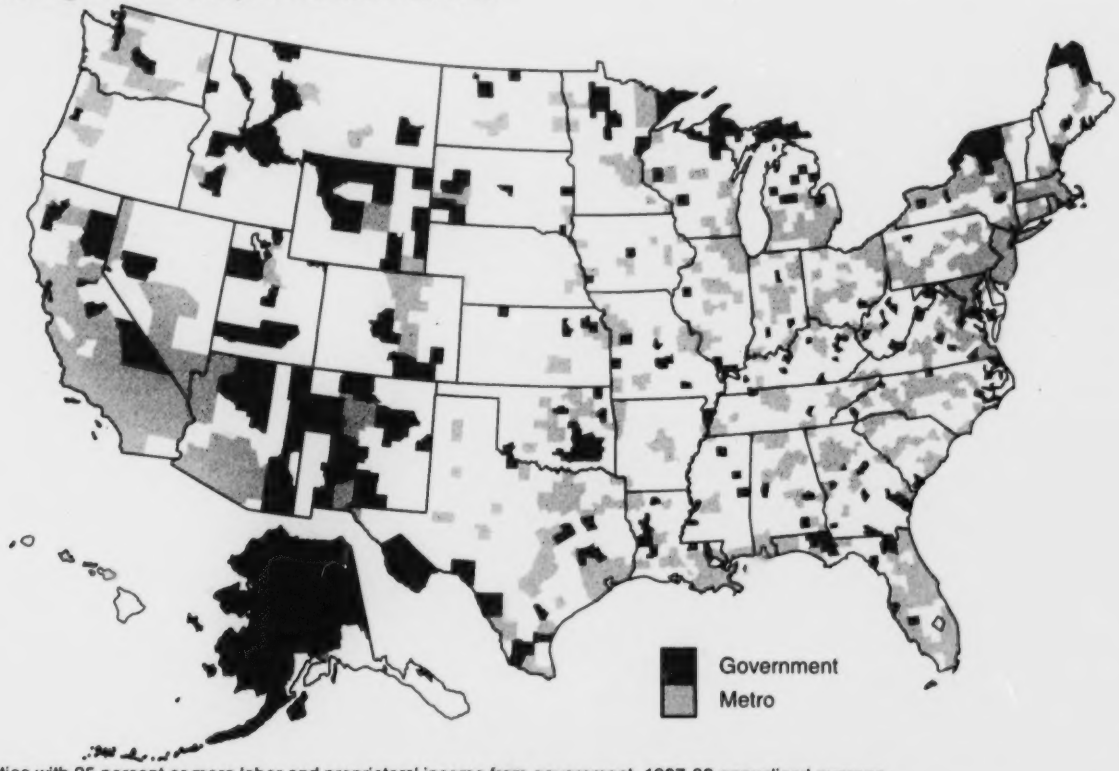
Government-dependent counties derive most of their government earnings from State and local government jobs, although Federal jobs play a more important role than in all-nonmetro counties.

In 244 nonmetro counties, the primary economic specialization was Federal, State, and local government activities. These counties are the sites for government-based activity associated with, among others, Federal, State, and local government offices, State institutions of higher education and health care, penal institutions, military bases, and headquarters for State and Federal parks and forests. County earnings from government jobs ranged from 25 to 77 percent of total earnings during 1987-89. For the group as a whole, earnings from government activities in 1989 accounted for 38 percent of total earnings, and earnings from trade/services activities accounted for an additional 38 percent.

Government-dependent counties, on average, derived approximately 75 percent of government earnings from State and local jobs and about 25 percent from Federal jobs. As might be expected, the reliance on Federal jobs relative to other government jobs was higher in government counties than in all-nonmetro counties, where only 17 percent of government earnings came from Federal activity. However, government activity in some counties was almost exclusively from Federal jobs and in other counties almost exclusively from State and local jobs.

Government counties are generally scattered across the Nation, with a slightly higher representation in the West, including most of Alaska (fig. 7). The West contains 15 percent of nonmetro counties but 27 percent of government counties. The government counties tended to be more highly urbanized, with one-fifth of the counties having between 20,000 and 50,000 people living in cities or towns, and 42 percent of the counties adjoining metro areas.

Figure 7
Nonmetro government-dependent counties, 1989*



*Counties with 25 percent or more labor and proprietors' income from government, 1987-89 annualized average.
Source: Rural Economy Division, Economic Research Service, USDA, using data from the Bureau of Economic Analysis.

Government counties, along with the services-dependent counties, experienced the largest population growth (slightly over 6-percent increase) of any of the county economic types during the 1980's (table 4). Population increased in government counties in all regions, with the largest growth (11 percent) occurring in the western government counties.

Government counties also experienced strong economic growth during the 1980's (fig. 8). Aggregate earnings increased 11 percent, significantly higher than the 3.4-percent increase for all-nonmetro counties. Because earnings declined in all goods-producing sectors, the overall earnings growth in government counties stemmed from growth in the two largest sectors--government and trade/services. Government counties had a combined gain in government and trade/services jobs in excess of 619,000 jobs with an offset from substantial losses in the goods-producing industries resulting in an overall gain of 433,000 new jobs.

Despite population and earnings growth, government counties had lower levels of economic well-being relative to all-nonmetro counties. Per capita income and per capita earnings averaged more than $1,000 lower than comparable all-nonmetro figures. The average poverty rate was the highest among the economic types. To a substantial extent, this results from the disproportionate number of low-income college students and military personnel in these counties. Nonetheless, the development of government-based activities, such as penal institutions, has revitalized the economies of some rural communities.

Table 4--Government-dependent counties: Selected characteristics

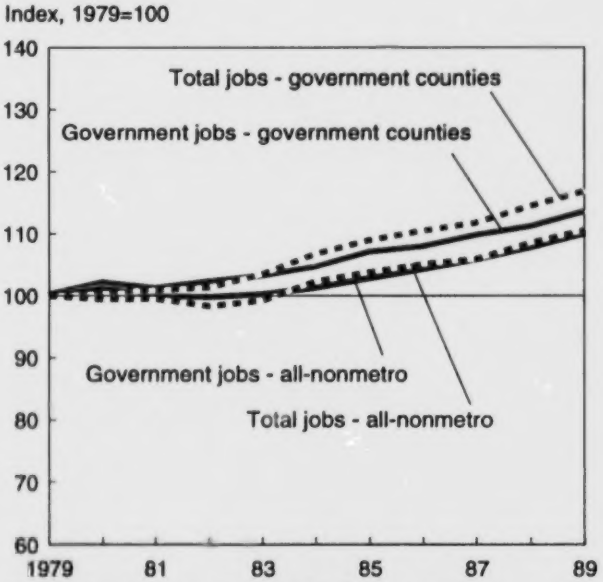
Item	Unit	Govern-ment counties	All-nonmetro counties
Counties	*Number*	244	2,276
Population, 1990	*Thousands*	6,571	50,898
Urbanized, 1993[1,2]	*Percent*	70.9	66.0
Population density, 1990[3,4]	*Number*	38.4	36.3
Population change, 1980-90[4]	*Percent*	6.2	.6
Per capita income, 1989[4]	*Dollars*	12,118	13,580
Earnings change, 1979-89:[5]			
Total earnings	*Percent*	11.0	3.4
Government earnings	*do.*	21.9	18.5

[1]Persons living in towns of 2,500 population or more. [2]Percentage of counties in group. [3]Persons per square mile. [4]Unweighted county averages. [5]Calculated from aggregated data.

Figure 8

Job growth in government-dependent and all-nonmetro counties

After stagnation and slight decline in the early 1980's, growth in government and total jobs picked up in government counties



Source: Rural Economy Division, ERS, USDA, using data from the Bureau of Economic Analysis.

Services-Dependent Counties

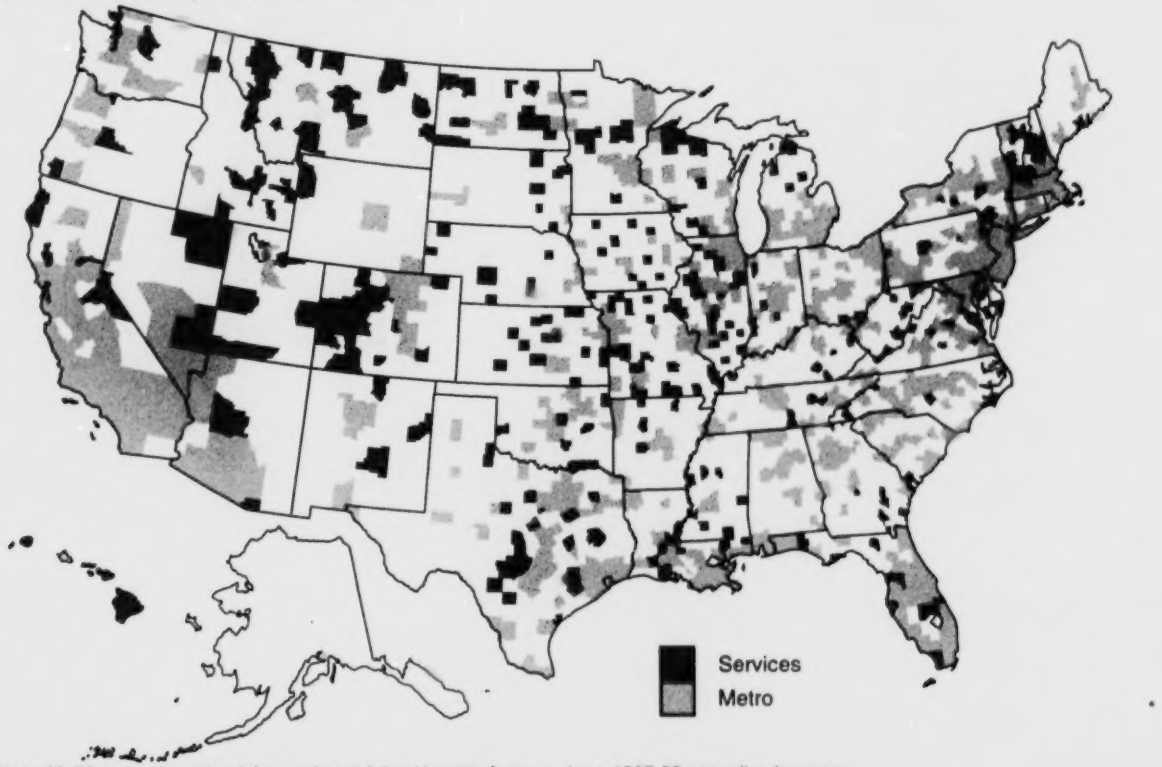
The services-dependent category reflects a dominant trend of growth in service sector jobs.

Growth in service sector jobs has been a dominant force in national industrial trends over the past two decades, accounting for 83 percent of new nonmetro jobs during 1979-89. Service sector jobs now permeate most rural economies. Earnings from service-related jobs include a mix made up of consumer services, distributive and business services, wholesale and retail trade, and education. The 323 services-dependent counties derived between 50 and 78 percent of total earnings from services employment during 1987-89.

Services counties, like government counties, are fairly evenly distributed across the Nation with a slightly higher representation in the West (fig. 9). Nearly 40 percent are in the Midwest. These counties, on average, experienced both population increase and population inmigration during the 1980's. Only services counties, of all the economic types, had inmovement of population. Population growth and inmigration occurred in all regions except the Midwest.

Services counties exhibit different degrees of urbanization, although a large majority have some population living in an urban place (table 5). More than 50 percent have some urban population and are not adjacent to a metro area. Another 29 percent have some urban population and are adjacent to a metro area. Only 18 percent have no urban population. (A third of the services counties contain a town/city of at least 10,000 population; a seventh have a city of 20,000 population or more). Depending on their degree of urbanization and proximity to a metro area, services counties are likely to perform different primary economic functions. For example, general trade/service centers are usually more urbanized but not adjacent to a metro area, consumer service centers

Figure 9
Nonmetro services-dependent counties, 1989*



*Counties with 50 percent or more labor and proprietors' income from services, 1987-89 annualized average.
Source: Rural Economy Division, Economic Research Service, USDA, using data from the Bureau of Economic Analysis.

provide primarily for residential areas, and specialized service centers for special purpose sites, like recreation areas, are near those sites. Seventy services counties were also retirement counties, and 60 were also Federal lands counties, indicating the important role of services in the economies of these types.

Like the government counties, the economies of services counties grew during the 1980's. Total earnings grew 9 percent (more than twice the rate for all-nonmetro counties), and earnings from services activity grew 24 percent (nearly twice the rate for all-nonmetro counties). Services counties grew slightly faster in total jobs and services jobs than all-nonmetro counties (fig. 10). Gains in two sectors--services with over 800,000 new jobs and government with 76,000 new jobs--led job growth in the services counties.

Contrary to government counties, the level of well-being for services counties' residents was higher than for all-nonmetro counties. With lower unemployment and a greater share of residents with high school educations, the services counties, on average, had median family income, per capita income, and per capita earnings that were higher than the average in all-nonmetro counties. The average poverty rate was the lowest of any of the economic types. However, an overall 8-percent decline in earnings per job suggests that the prospects for continued higher levels of economic well-being in the 1990's are uncertain.

Table 5--Services-dependent counties: Selected characteristics

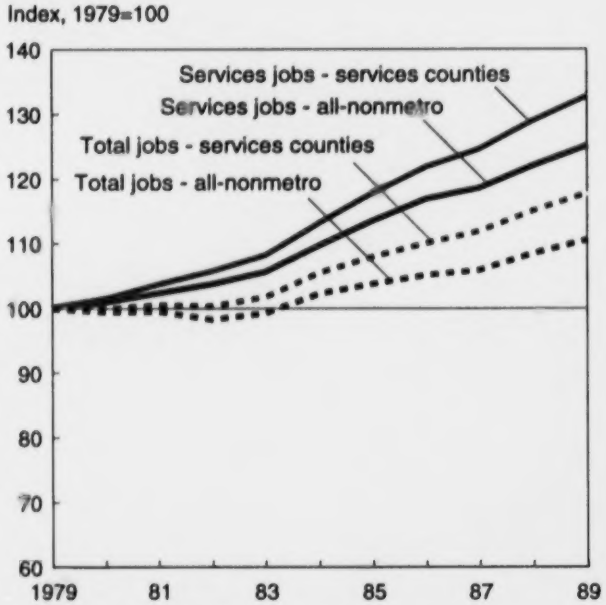
Item	Unit	Services counties	All-nonmetro counties
Counties	*Number*	323	2,276
Population, 1990	*Thousands*	9,594	50,898
Urbanized, 1993[1,2]	*Percent*	82.3	66.0
Population density, 1990[3,4]	*Number*	43.4	36.3
Population change, 1980-90[4]	*Percent*	6.3	.6
Per capita income, 1989[4]	*Dollars*	14,384	13,580
Earnings change, 1979-89:[5]			
Total earnings	*Percent*	8.5	3.4
Services earnings	*do.*	23.5	13.2

[1]Persons living in towns of 2,500 population or more. [2]Percentage of counties in group. [3]Persons per square mile. [4]Unweighted county averages. [5]Calculated from aggregated data.

Figure 10

Job growth in services-dependent and all-nonmetro counties

Services-dependent counties surpassed all-nonmetro counties in job growth for service jobs and total jobs



Source: Rural Economy Division, ERS, USDA, using data from the Bureau of Economic Analysis.

Nonspecialized Counties

The nonspecialized group includes counties whose economies did not fall into one of the economic specializations.

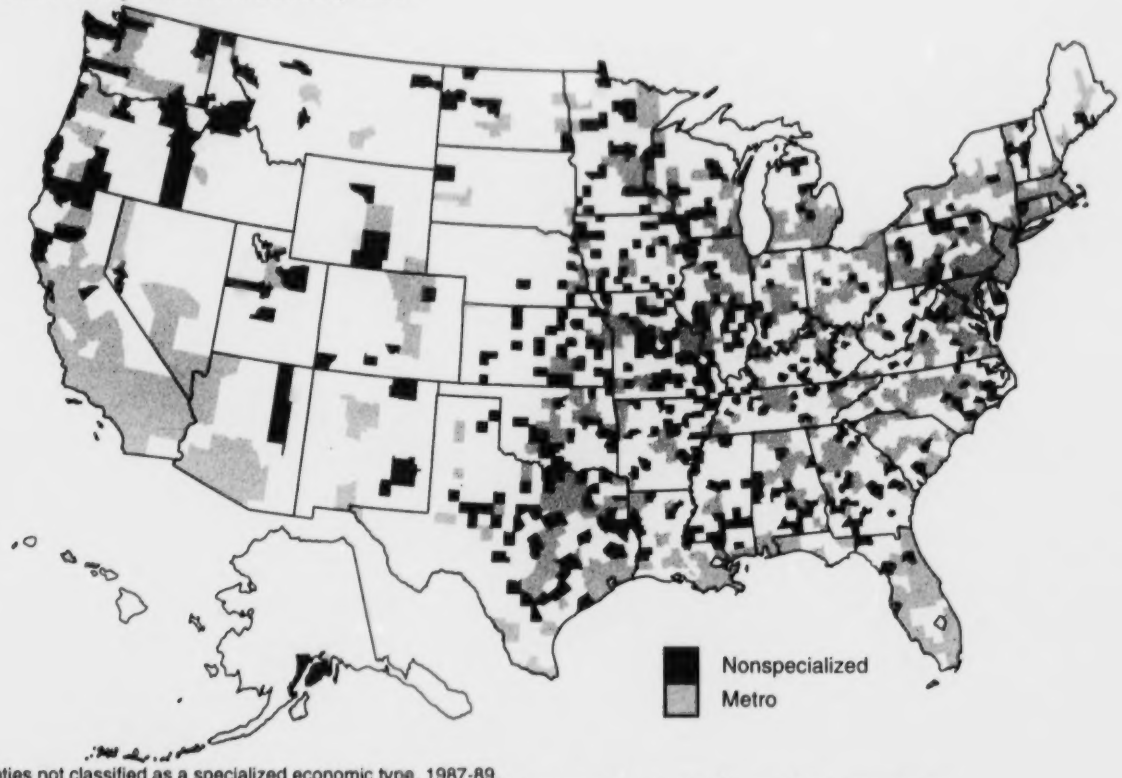
The nonspecialized group includes 484 counties whose economies did not qualify for one of the economic specialization types. They represented approximately 20 percent of nonmetro counties, population, jobs, and earnings. Though defined somewhat differently, the nonspecialized type is a residual group replacing the unclassified category in earlier typologies. About 150 of the nonspecialized counties were unclassified counties in the 1979 typology, 116 were farming counties, and 81 were manufacturing counties.

As a group, nonspecialized counties resemble all-nonmetro counties on many demographic, population, and economic characteristics. Their industrial structure mirrors closely that of all-nonmetro counties, although the share of jobs from farming was slightly higher.

Two-thirds of the nonspecialized counties experienced job growth during the 1980's. Growth in jobs (and earnings) was somewhat slower than the all-nonmetro rate (fig. 12, table 6). Income levels (per capita and median family) were slightly lower, and reliance on transfer income was higher than for all-nonmetro counties. The nonspecialized group had $36 of transfer income for every $100 of earned income--the second highest ratio for any of the economic groups.

Nonspecialized counties dot the national landscape (fig. 11). They appear in 44 of the 50 States (excluding Maryland, Massachusetts, New Hampshire, Rhode Island, Hawaii, and New Jersey, which is totally metro). The large majority are located in the South (49 percent) and the Midwest (37 percent). Texas contains 47 nonspecialized counties, Missouri 39, and Georgia and Kentucky each contain 30. About

Figure 11
Nonmetro nonspecialized counties, 1989*



*Counties not classified as a specialized economic type, 1987-89.
Source: Rural Economy Division, Economic Research Service, USDA, using data from the Bureau of Economic Analysis.

two-thirds of nonspecialized counties have between 2,500 and 20,000 population living in urban places. Nearly 60 percent of the counties are adjacent to a metro area. The land area in nonspecialized counties was smaller (874 square miles), on average, than in all-nonmetro counties (1,256 square miles).

Of the nonspecialized counties, 124 overlapped with persistent poverty counties and 119 overlapped with commuting counties. The proportion of workers commuting outside the county to work ranged from 3 percent to 83 percent. The evidence reviewed here suggests that the nonspecialized group includes counties with two general kinds of economic performance in the 1980's. First, there are counties that had strong economies associated with diversification or associated with strong service sector growth in counties that are residential sites for adjacent metro spillover. Second, there are those counties that had weak economies caused by shifts away from specializations in farming or manufacturing or caused by having a small economic base and/or high concentrations of poverty. In improved economic times, some of the nonspecialized group may return to one of the economic specializations. The nonspecialized group also includes a few counties that are specialized in economic activities such as construction, agricultural services, or forestry or fisheries.

Table 6–Nonspecialized counties: Selected characteristics

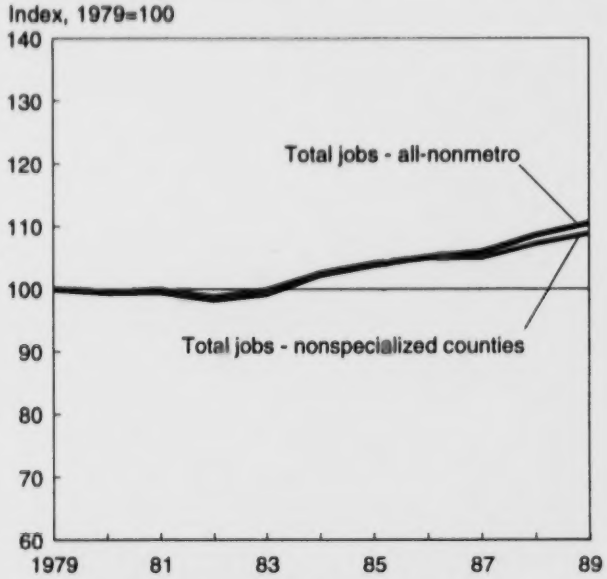
Item	Unit	Nonspecialized counties	All-nonmetro counties
Counties	*Number*	484	2,276
Population, 1990	*Thousands*	11,105	50,898
Urbanized, 1993[1,2]	*Percent*	73.9	66.0
Population density, 1990[3,4]	*Number*	36.0	36.3
Population change, 1980-90[4]	*Percent*	1.7	.6
Per capita income, 1989[4]	*Dollars*	13,004	13,580
Earnings change, 1979-89[5]	*Percent*	.6	3.4
Counties with earnings growth, 1979-89[2]	*do.*	49.0	49.8

[1]Persons living in towns of 2,500 population or more. [2]Percentage of counties in group. [3]Persons per square mile. [4]Unweighted county averages. [5]Calculated from aggregated data.

Figure 12

Job growth in nonspecialized and all-nonmetro counties

Job growth in nonspecialized counties mirrors that for all-nonmetro counties with improvement occurring in the second half of the decade



Source: Rural Economy Division, ERS, USDA, using data from the Bureau of Economic Analysis.

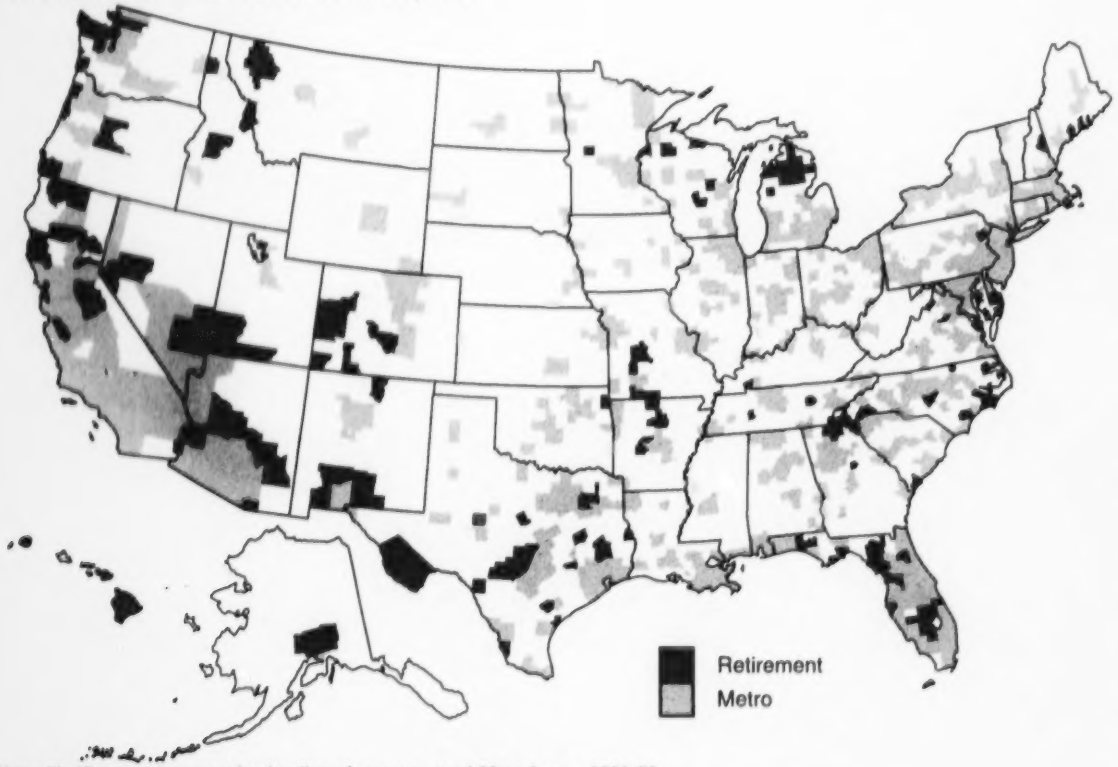
Retirement-Destination Counties

Retirement counties' population grew as both retirees and younger age groups moved in.

The movement of retirees into rural and smalltown areas was an important trend during the 1960's and 1970's. Factors contributing to the trend included improved health of older people, earlier retirement ages, higher retirement incomes, and living conditions and amenities of rural areas and small towns that made them desirable sites for retirement. Counties serving as retirement-destination areas for older people continue to represent an important category in the typology, although the trend slowed partly because of the economic slump of the early 1980's and an associated drop in real estate activity, reducing the number of retirement destination areas significantly during the 1980's. The retirement group now includes 190 counties, of which 158 were retirement counties in the 1979 typology. Population aged 60 and above in these counties increased by at least 15 percent from inmovement of people between 1980 and 1990. The increases ranged from 15 percent to 121 percent.

Over 80 percent of retirement counties are located in the South and West (fig. 13). They are more prevalent in the traditional retirement areas with warm climates of Florida and parts of the Southwest, and in lake, reservoir, coastal, or scenic upland areas. Over half of the nonmetro counties in Arizona, Florida, and Hawaii are retirement-destination areas. States with less than half but more than a quarter of nonmetro counties serving as retirement areas include California, Massachusetts, Michigan, Nevada, and North Carolina. Retirement counties tend to be more rural, with few having over 20,000 people living in a city or town. Nearly 40 percent of the counties are totally rural, and another 50 percent have from 2,500 to 20,000 population living in towns or small cities.

Figure 13
Nonmetro retirement-destination counties, 1990*



*Counties with 15 percent or more inmigration of persons aged 60 and over, 1980-90.
Source: Rural Economy Division, Economic Research Service, USDA, using data from Bureau of the Census.

Many retirement counties are also recreation and resort areas, as evidenced by a considerable number of overlaps with Federal lands and services counties. As a result, they attract both younger populations and retirees. While the average growth in population aged 65 and over was 45.4 percent during the 1980's, the 18 to 34 and 35 to 64 age groups also grew by 9.3 and 35.4 percent, respectively. Compared with other county types, the retirement group was the only type with a population gain in the younger age category, and had the highest growth in the 35 to 64 age group of all the types. The larger share of the younger population helps explain the fact that the share of population that was 65 years old and over (17.8 percent) in 1990 was only moderately higher than the all-nonmetro average of 15.9 percent (table 7). Unlike farming counties, where outmovement of younger population has left behind a share of elderly population (18.3 percent) even higher than that for retirement counties, the growth in both younger and older aged populations has created a favorable mix for the economic growth and expansion in retirement counties during the 1980's.

Population and economic growth characterized the retirement counties during the 1980's. Nearly all retirement counties experienced population growth. Their average population growth rate from 1980 to 1990 was 23 percent, the highest of all 11 types (versus 0.6 for all-nonmetro counties). Furthermore, retirement counties in all four regions gained population with rates ranging from a low of 15 percent in the Midwest to 28 percent in the Northeast. The retirement group was the only type that had inmigration overall and in all regions.

Nearly all retirement counties experienced job growth during the decade; 60 percent grew faster than the national average. These counties also had the highest job growth (34.3 percent) and earnings growth (25.9 percent) of all types. Jobs grew more than three times faster than the all-nonmetro rate due in part to growth in services, government, and construction jobs. Nearly three-fifths of jobs in the retirement group were in the services sector (fig. 14).

Table 7–Retirement-destination counties: Selected characteristics

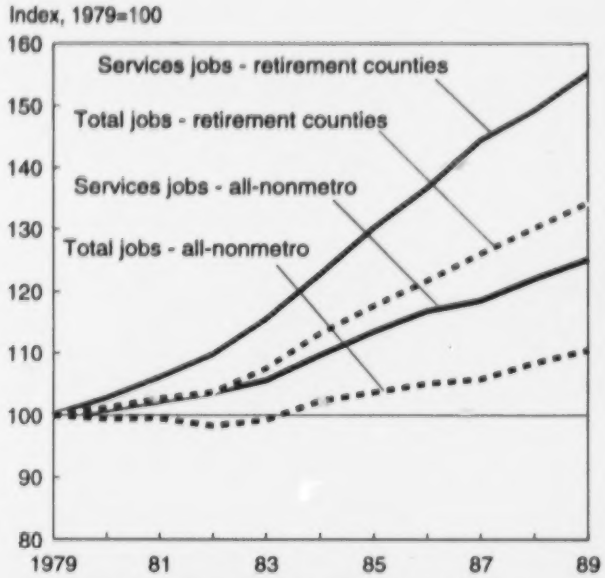
Item	Unit	Retirement counties	All-nonmetro counties
Counties	*Number*	190	2,276
Population, 1990	*Thousands*	5,205	50,898
Elderly population, 1990[1]	*Percent*	17.8	15.9
Population density, 1990[1,2]	*Number*	38.3	36.3
Population change, 1980-90[1]	*Percent*	22.7	.6
Per capita income, 1989[1]	*Dollars*	13,698	13,580
Per capita transfer income, 1989[1]	*do.*	2,876	2,636
Job growth, 1979-89[3]	*Percent*	34.3	10.6
Service job growth, 1979-89[3]	*do.*	65.0	36.9

[1]Unweighted county averages. [2]Persons per square mile. [3]Calculated from aggregated data.

Figure 14

Job growth in retirement-destination and all-nonmetro counties

The pace of job growth in retirement-destination counties was far higher than that for all-nonmetro counties due in large part to growth in the service sector



Source: Rural Economy Division, ERS, USDA, using data from the Bureau of Economic Analysis.

Policy Type

Federal Lands Counties

Federal lands counties are larger and more sparsely populated than are all-nonmetro counties, but some counties have 20,000 to 50,000 people living in towns or small cities.

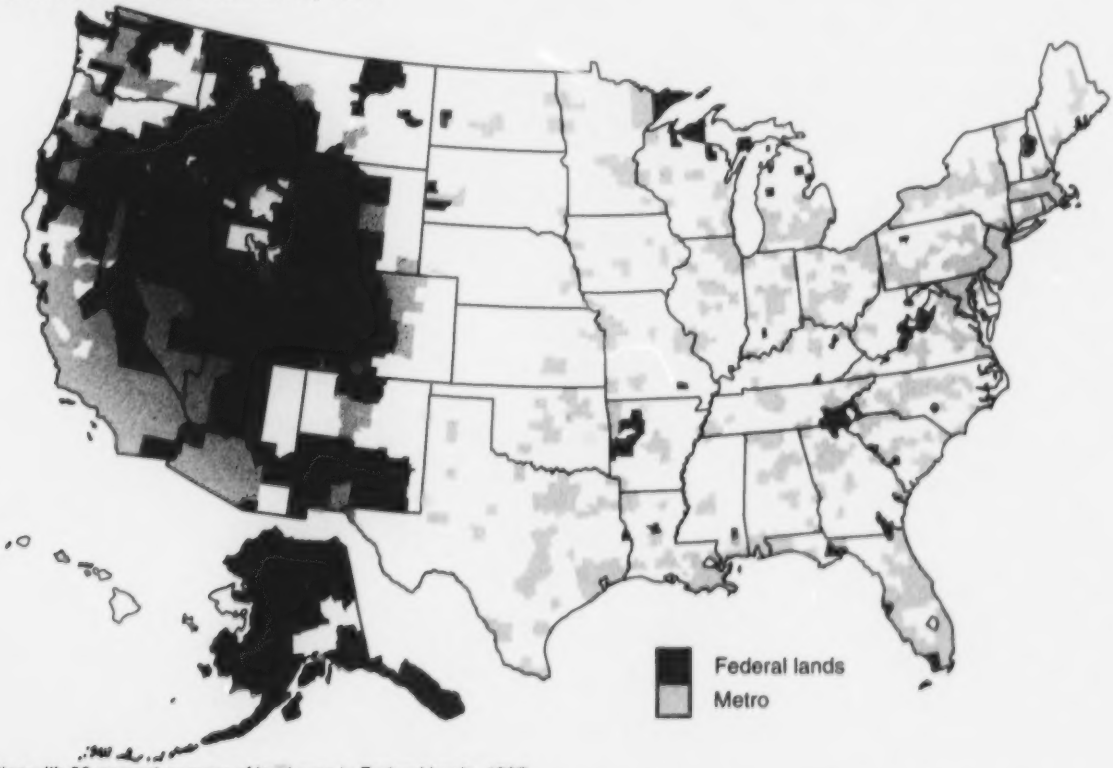
Federal lands counties, which are generally affected by Federal policies relating to land and the environment, as well as tourism activities, are an important policy type. There were 270 Federal lands counties--those with 30 percent or more of land area in Federal ownership in 1987. The amount of federally owned acreage in these counties ranged from 30 to 99 percent. The Federal lands group contained 12 percent of nonmetro counties, 11 percent of nonmetro jobs, and 11 percent of nonmetro earnings in 1989.

Western States accounted for 76 percent of Federal lands counties (fig. 15). Over half of nonmetro counties in Alaska, Arizona, California, Colorado, Idaho, Nevada, Oregon, Utah, and Wyoming are Federal lands counties. Small concentrations of counties are located in national forests in parts of Appalachia, the Ozarks, and in the northern parts of Michigan, Minnesota, and Wisconsin.

Federal lands counties were a little more likely to be totally rural than all-nonmetro counties (37 percent compared with 34 percent) and much more likely not to be adjacent to a metro area (74 percent compared with 57 percent). With a much larger land area (4,312 square miles in the average county), population density averaged only 15.4 persons per square mile, the lowest of any of the county types except farming. However, the population does not always live in rural parts of these counties. About 14 percent of the counties had between 20,000 and 50,000 people living in towns or small cities.

With the bulk of the counties located in the rapidly growing West, the population in Federal lands

Figure 15
Nonmetro Federal lands counties, 1987*



*Counties with 30 percent or more of land area in Federal lands, 1987.
Source: Rural Economy Division, Economic Research Service, USDA, using data from the Soil Conservation Service, USDA.

counties, on average, grew significantly faster during the 1980's than in the all-nonmetro counties, 9 percent versus 0.6 percent (table 8). Although the population in the 18 to 34 age group declined, the population in the 35 to 64 age group and the 65 and over age group grew by 27.7 percent and 32.7 percent, respectively. Gain in the elderly category reflects some overlap with the retirement-destination counties, although only 14 percent of the population in the average county was age 65 and over, the lowest for any of the policy types.

People living in the Federal lands counties fared slightly better economically than those in all-nonmetro counties. The average poverty rate (15.8) was the lowest of all the types. Their median family income averaged $27,923 in 1989, over $1,900 higher than the all-nonmetro figure, although per capita income of $13,807 and per capita earnings of $8,823 were similar to the all-nonmetro figures.

The strong growth in the services sector in the 1980's probably contributed to higher levels of family income. Nearly 70 percent of jobs in the average Federal lands county were in the services or government sectors, reflecting the recreational use and land management functions of the group. Of the net gain of slightly more than 430,000 new jobs, over 429,000 were in the services sector and about 63,000 in the government sector. Jobs in the farming and mining sectors declined. Earnings from services jobs grew about 17 percent compared with 13 percent for all-nonmetro counties, and the jobs themselves grew by 45.2 percent compared with 36.9 percent for all-nonmetro counties (fig. 16). Earnings and jobs in the government sector also grew more rapidly than they did in the all-nonmetro group.

Table 8--Federal lands counties: Selected characteristics

Item	Unit	Federal lands counties	All-nonmetro counties
Counties	*Number*	270	2,276
Population, 1990	*Thousands*	5,425	50,898
Totally rural, 1993[1,2]	*Percent*	37.0	34.0
Population density, 1990[3,4]	*Number*	15.4	36.3
Population change, 1980-90[4]	*Percent*	9.0	.6
Per capita income, 1989[4]	*Dollars*	13,807	13,580
Counties with fast job growth, 1979-89[5]	*Percent*	33.5	16.0
Job growth, 1979-89[6]	*do.*	19.4	10.6
Service job growth, 1979-89[6]	*do.*	45.2	36.9

[1]No persons living in towns of 2,500 population or more. [2]Percentage of counties in group. [3]Persons per square mile. [4]Unweighted county averages. [5]Percentage of counties in group with job growth greater than or equal to the average for U.S. growing counties (22.29). [6]Calculated from aggregated data.

Figure 16

Job growth in Federal lands and all-nonmetro counties

Growth in service sector jobs was an important component of overall job growth in Federal lands counties

Source: Rural Economy Division, ERS, USDA, using data from the Bureau of Economic Analysis.

Policy Type

Commuting Counties

Commuting counties have a substantial share of their workforce commuting to jobs outside the county, are small, and are apt to be near a metro area.

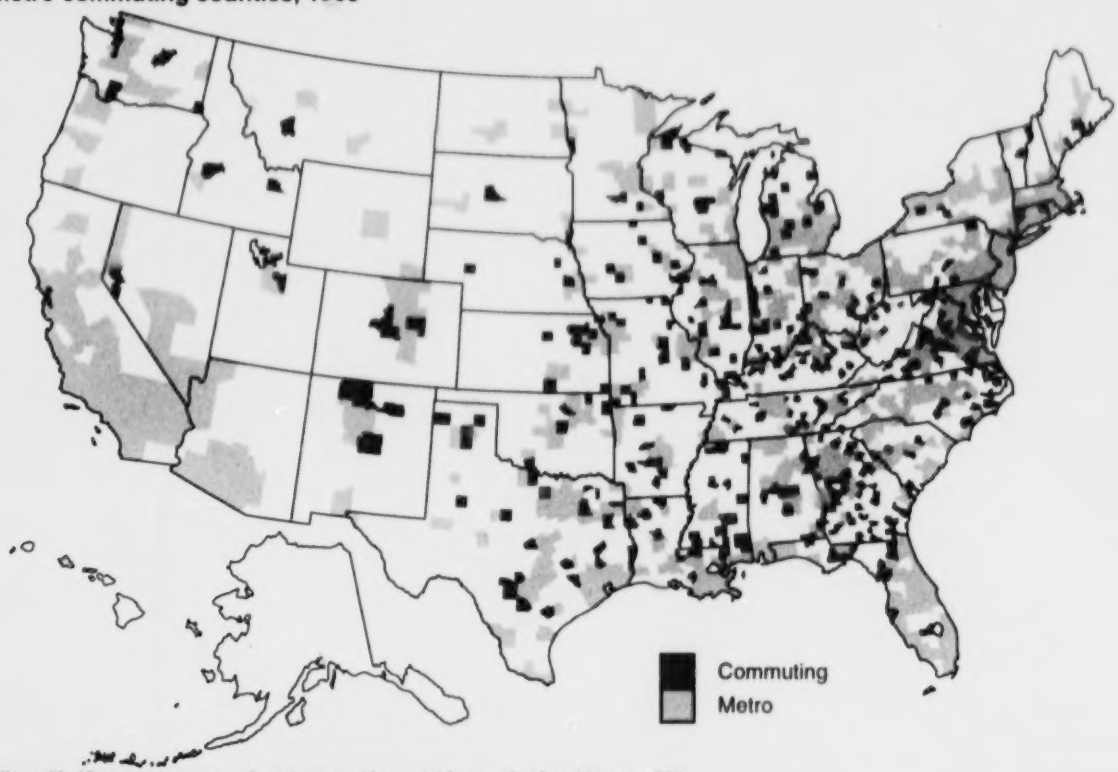
The commuting counties represent counties whose economies are shaped, in part, by major outflows of workers commuting to jobs in other counties. These 381 counties had 40 percent to 84 percent of their workforce commuting to jobs outside the county. Over 6 million people, 12 percent of the nonmetro population, lived in the commuting counties in 1990.

Nearly two-thirds of these counties are in the South, and more than a fourth are in the Midwest (fig. 17). Georgia has 51 commuting counties, the largest number of any State. Other States having at least 20 commuting counties are Kentucky (33), Mississippi (20), Texas (25), and Virginia (27).

Associated with their location in States where counties tend to be small, commuting counties' average land area was 530 square miles in 1990 compared with an all-nonmetro county average of 1,256 square miles--the smallest of the 11 county types. Over two-thirds of the commuting counties adjoined a metro area to which their economies were likely linked (table 9). Nearly all of these either had no substantial urban population (under 20,000 persons living in cities and towns over 2,500 population) or were totally rural (no persons living in cities and towns over 2,500 population). An additional 25 percent of counties were nonadjacent and totally rural. Commuting counties gained population during the 1980's at a rate higher than the all-nonmetro rate; the fastest growth was in the 35 to 64 age group.

The dominant characteristics of the commuting counties indicate somewhat higher shares of disadvantaged populations. Relative to all-nonmetro counties, commuting counties had higher percentages

Figure 17
Nonmetro commuting counties, 1990*



*Counties with 40 percent or more of workers working outside county of residence, 1990.
Source: Rural Economy Division, Economic Research Service, USDA, using data from Bureau of the Census.

of Blacks, disabled, unemployed, persons lacking a high school education, and high school dropouts, characteristics consistent with disproportionately southern location. The average per capita income in the commuting counties was $12,579, about $1,000 less than the all-nonmetro average, but median family income, which averaged $26,117, and per capita earnings, which averaged $8,236, were similar to the all-nonmetro values. Thus, income may be unevenly distributed between the working and poor populations.

Activity within the local economies of commuting counties was considerably less than that in all-nonmetro counties. Reflecting the high reliance on external sources of work for many residents, the counties averaged only 35 jobs per 100 population, the lowest ratio of any of the types. The economic picture changes when the jobs and earnings for commuting workers are taken into account. For example, the worker/population ratio (all workers) for commuting counties was 66 workers per 100 population, about the same as the all-nonmetro average of 68 workers per 100 in 1990.

Industrial activity was slightly more oriented towards goods-producing jobs than other types except for manufacturing. Compared with all-nonmetro counties, overall earnings grew faster and overall jobs grew at a comparable rate (fig. 18). Over 70 percent of commuting counties saw some job growth during the decade.

The commuting counties' overlap with other types helps shed light on their economic status. A sizable number of counties are farming and/or former farming (140 in all), over 80 are also manufacturing, and 119 are in the nonspecialized category. Considering their small population size and proximity to metro areas, the commuting group, like the nonspecialized counties, seems to be made up of different county subgroups. One subgroup of counties is within commuting proximity of metro centers that are growing primarily from metro spillover and may function primarily as residential communities for commuting workers. A second subgroup includes current or former farming or manufacturing counties with low and/or declining economic bases that have forced workers to leave the county for jobs. A third subgroup includes very small counties that function as part of a larger labor market area.

Table 9–Commuting counties: Selected characteristics

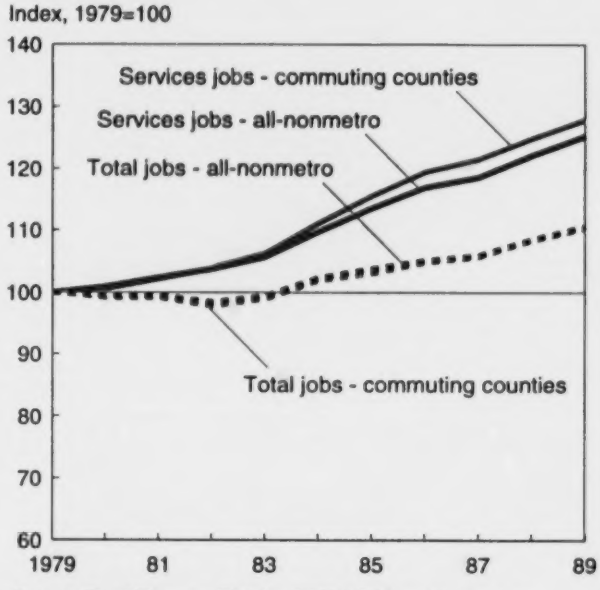
Item	Unit	Commuting counties	All-nonmetro counties
Counties	*Number*	381	2,276
Population, 1990	*Thousands*	6,048	50,898
Black population, 1990	*Percent*	13.0	8.0
Adjacent to metro area, 1993[1]	*do.*	68.7	43.5
Population density, 1990[2,3]	*Number*	35.0	36.3
Population change, 1980-90[3]	*Percent*	4.7	.6
Per capita income, 1989[3]	*Dollars*	12,579	13,580
Commuting workers, 1990[3]	*Percent*	50.9	25.2
Earnings change, 1979-89[4]	*do.*	6.1	3.4

[1]Percentage of counties in group. [2]Persons per square mile. [3]Unweighted county averages. [4]Calculated from aggregated data.

Figure 18

Job growth in commuting and all-nonmetro counties

Despite slightly lower levels of economic activity, jobs in commuting counties grew at a rate very similar to the all-nonmetro rate



Source: Rural Economy Division, ERS, USDA, using data from the Bureau of Economic Analysis.

Policy Type

Persistent Poverty Counties

Persistent poverty counties have a disproportionate share of people with characteristics associated with low levels of labor force participation.

Although poverty has declined over time in nonmetro areas as a whole, it remains a serious, chronic problem in many nonmetro counties. In 1990, 535 nonmetro counties with poverty rates of 20 percent or more in 1960, 1970, 1980, and 1990 were classified as persistent poverty counties. The poverty group represented 24 percent of nonmetro counties, 19 percent of nonmetro population, and 32 percent (2.7 million) of the nonmetro poor in 1990. The 1990 poverty rates ranged from 20 percent to 63 percent with an average of 29 percent, about twice other nonmetro counties.

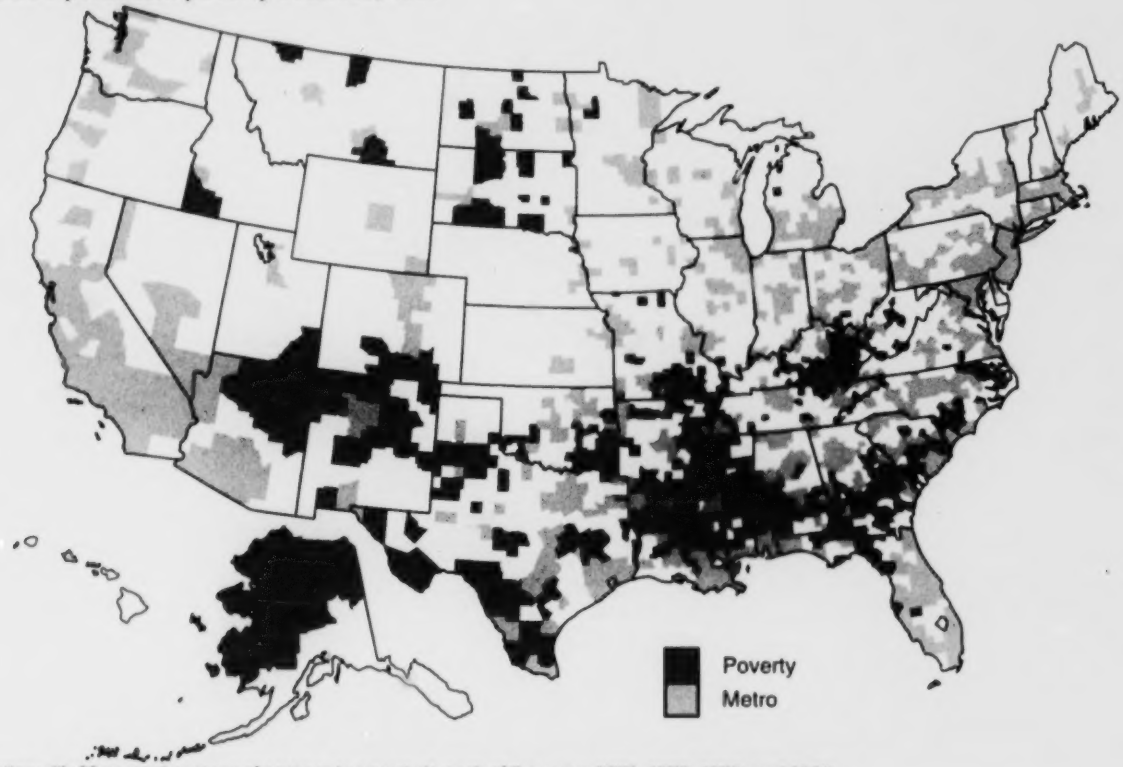
The persistent poverty counties are heavily concentrated in the South: 83 percent, with disproportionate representation in Appalachia, the Ozark-Ouachita area, and the Mississippi Delta (fig. 19). Others are scattered in areas of the Southwest or Northern Plains. Over 80 percent of Mississippi and Louisana nonmetro counties and 50-60 percent of Alabama, Georgia, Kentucky, and South Carolina nonmetro counties are persistent poverty counties.

Poverty counties tend to be smaller and have less urban populations than many of the county types. Nearly 40 percent of the counties had no people living in towns or small cities in 1990, compared with 34 percent of all-nonmetro counties. Three-fifths of poverty counties were nonadjacent to a metro area. Poverty counties averaged 17,876 people in 1990; population size was smaller in only three other county types--farming, commuting, and transfers-dependent.

The poverty group has disproportionate numbers of economically at-risk people with characteristics that affect their levels of labor force participation. For

Figure 19

Nonmetro persistent poverty counties, 1990*



*Counties with 20 percent or more of persons in poverty in each of the years 1960, 1970, 1980, and 1990.
Source: Rural Economy Division, Economic Research Service, USDA, using data from Bureau of the Census.

example, people living in persistent poverty counties in 1990, compared with all-nonmetro counties, were more likely to belong to a minority group (Black, Hispanic, or Native American), live in a female-headed household, lack a high school education, be a high school dropout, and/or have a physical or mental disability (table 10).

In keeping with the higher proportions of disadvantaged people, poverty counties had lower income levels and more pronounced underemployment than most other county types. Per capita income in 1989 lagged the average all-nonmetro per capita income by over $2,500. Similarly, earnings per capita and median family income were the lowest among the types with the exception of the transfers-dependent counties. Residents relied heavily on transfer payment income; the ratio of $42 of transfer income to every $100 of earned income was exceeded only by the ratio in transfers-dependent counties. The unemployment rate in the persistent poverty counties was 8.5 percent in 1990, considerably above the 6.6 all-nonmetro rate, and the ratio of 39 jobs to every 100 people fell under the all-nonmetro ratio of 47 jobs to every 100 people. Only the transfers-dependent and commuting groups had jobs/population ratios lower than the ratio in the poverty group.

Evidence suggests that the chronic poverty in the persistent poverty counties is directly attributable to the composition and characteristics of the population, although the role of local economies in encouraging chronically high poverty levels is not as clearcut. On the one hand, the high unemployment rate and the lower number of jobs per capita suggest that the economy plays a part in providing insufficient job opportunities. On the other hand, the industrial mix of jobs in persistent poverty counties does not differ substantially from the all-nonmetro pattern, although the shares of jobs in the farming, manufacturing, and government sectors were slightly higher and the share in the services sector was slightly lower. (Poverty counties overlapped fairly heavily with farming (135), manufacturing (119), and nonspecialized (124) counties; but the greatest overlap (233 counties) was with transfers counties.) Jobs grew by about 6 percent from 1979 to 1989, while earnings grew only 0.1 percent. The rate of overall job growth was 5 percentage points under that for all-nonmetro counties (fig. 20). Earnings per job in 1989 were the second lowest of all the county types, suggesting that many of the low-paying jobs were leading to high levels of working poverty. Chronic poverty in the poverty counties involves both a human resources problem and a lack of opportunities for jobs that pay decent wages.

Table 10–Persistent poverty counties: Selected characteristics

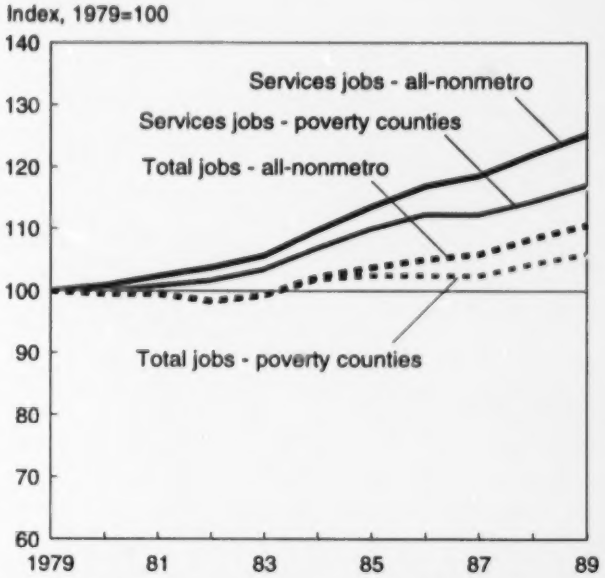
Item	Unit	Persistent poverty counties	All-nonmetro counties
Counties	*Number*	535	2,276
Population, 1990	*Thousands*	9,564	50,898
Totally rural, 1993[1,2]	*Percent*	39.2	34.0
Population density, 1990[3,4]	*Number*	29.7	36.3
Population change, 1980-90[4]	*Percent*	-1.3	.6
Per capita income, 1989[4]	*Dollars*	11,056	13,580
Per capita transfer income, 1989[4]	*do.*	2,705	2,636
Black population, 1990[5]	*Percent*	21.2	8.0
Poverty population, 1990[5]	*do.*	29.1	18.3
Disabled population, 1990[5,6]	*do.*	12.4	10.2

[1]No persons living in towns of 2,500 population or more. [2]Percentage of counties in group. [3]Persons per square mile. [4]Unweighted county averages. [5]Percent of persons; unweighted county averages. [6]Persons with a physical or mental health condition of at least 6 months duration that limited the kind or amount of work they could do.

Figure 20

Job growth in poverty and all-nonmetro counties

Total jobs in the persistent poverty counties grew by about 6 percent from 1979 to 1989, a rate slower than the all-nonmetro rate



Source: Rural Economy Division, ERS, USDA, using data from the Bureau of Economic Analysis.

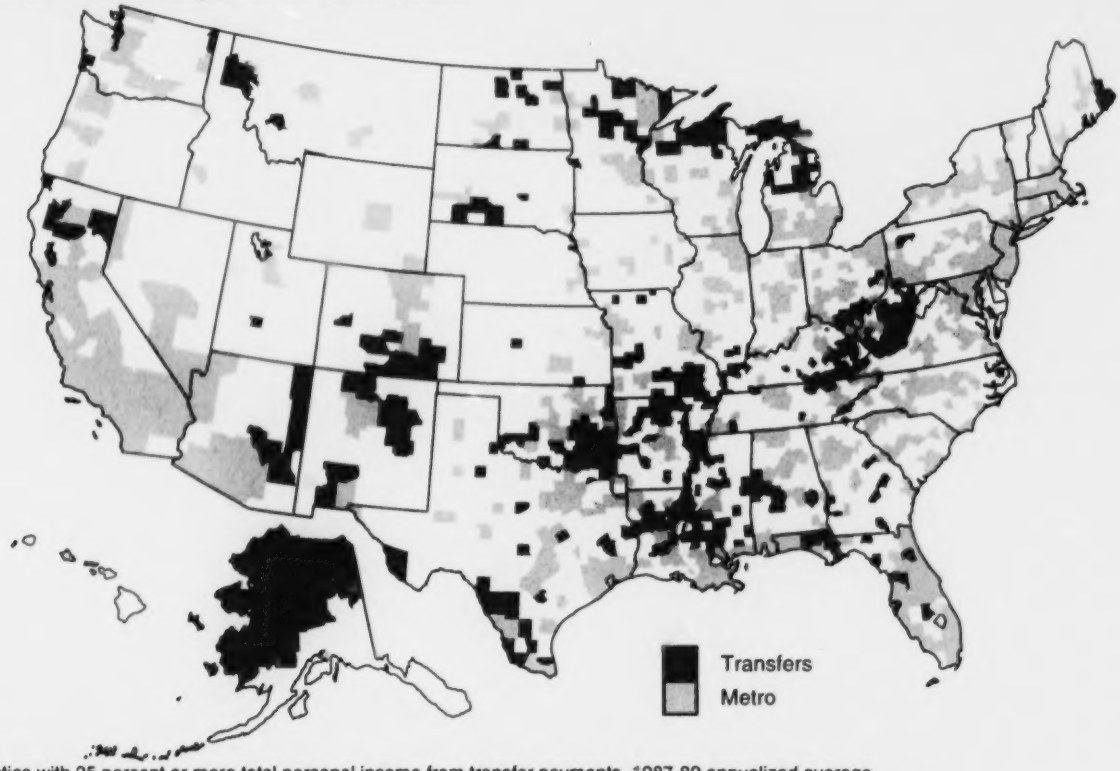
Transfers-Dependent Counties

Like the persistent poverty counties, counties that depend on income from government transfer payments have disproportionate shares of people with traits limiting labor force participation.

The transfers-dependent counties had economies heavily based on unearned income from government transfer payments. Such payments include income transferred to eligible recipients under the auspices of Federal, State, and local programs including social security, unemployment, medicare, medicaid, food stamps, government and military pensions, and welfare programs like Aid to Families with Dependent Children (AFDC), Supplemental Security Income (SSI), and State and local general assistance programs. The 381 nonmetro counties in the transfers category derived an annualized average of at least 25 percent of personal income from transfers, 1987 to 1989. Income from transfer payments in the transfers counties ranged from 25 percent to 45 percent. By definition, transfers counties are directly affected by changes and variations in Federal, State, and local government transfer programs. For example, the wide State variation in benefit levels for AFDC affects the chances of a county being classified as a transfers-dependent county.

Counties that depend on transfers income are regionally concentrated in parts of the South and Midwest (fig. 21). The majority (64 percent) are in the Southern States. An additional 26 percent are in Midwestern States, and nearly 10 percent are in the Western States. Counties in the transfers group, relative to all-nonmetro counties, tended to be located in more remote locations away from metro areas and to be slightly more sparsely populated. Nearly 70 percent of the counties did not adjoin a metro area, and over half of these were totally rural counties. Transfers counties were less apt to be located in the South and more apt to be located in the Midwest and West than were the persistent poverty counties.

Figure 21
Nonmetro transfers-dependent counties, 1989*



*Counties with 25 percent or more total personal income from transfer payments, 1987-89 annualized average.
Source: Rural Economy Division, Economic Research Service, USDA, using data from the Bureau of Economic Analysis.

Because of the heavy overlap (233 counties) with persistent poverty counties, the transfers-dependent counties exhibit many of the same demographic and economic traits attributed to the persistent poverty counties. Like the persistent poverty counties, the transfers-dependent counties had populations with disproportionate shares of economically disadvantaged groups, including Blacks, Hispanics, female-headed households, handicapped persons, and undereducated persons including high school dropouts (table 11). Counties averaged a poverty rate of 27.5 percent, only slightly under the poverty rate in persistent poverty counties. Given the general makeup of the populations in many of the transfers-dependent counties, the group had the lowest incomes and highest unemployment of the county types. On average, transfers income made up 29 percent of personal income in the transfers-dependent counties compared with 20.1 percent in all-nonmetro counties. Over 36 percent of households in the transfers group received social security and about 15 percent received some form of public assistance in 1989.

Unlike the persistent poverty counties but in keeping with the large share of transfer payments accounted for by social security and medicare, the population of transfers-dependent counties included a larger share of elderly. Only the farming and retirement counties had proportions of elderly population higher than that for the transfers-dependent counties. Thus, transfers-dependent counties dispoportionately represent areas dependent on assistance to poverty-prone populations and/or areas with high proportions of retired people.

The industrial mix of jobs in transfers-dependent counties generally resembled the mix for all-nonmetro counties as of 1989; however, their economies grew more slowly over the 1980's. Overall real earnings declined by 9 percent, the highest loss of any type except the mining group. And the pace of overall job growth in the transfers-dependent counties was much slower than the all-nonmetro pace. Services jobs in the transfers-dependent counties grew at a faster rate than overall job growth, but still significantly under the all-nonmetro rate (fig. 22). Furthermore, there was a substantial decline in earnings per job between 1979 and 1989.

Table 11--Transfers-dependent counties: Selected characteristics

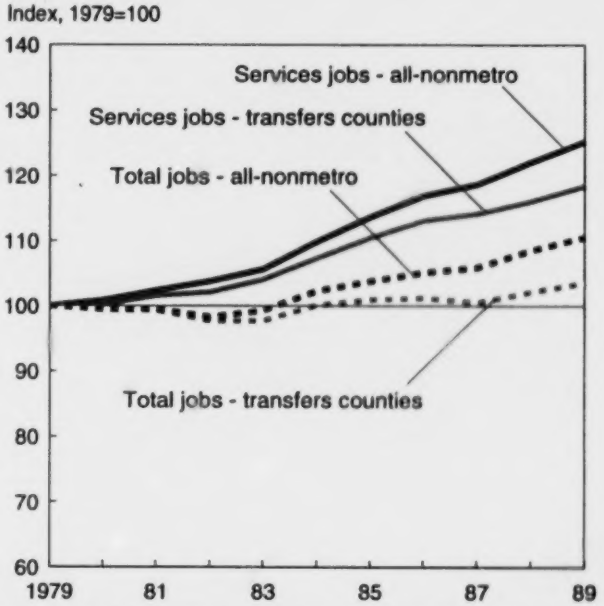
Item	Unit	Transfers counties	All-nonmetro counties
Counties	*Number*	381	2,276
Population, 1990	*Thousands*	6,658	50,898
Totally rural, 1993[1,2]	*Percent*	44.7	34.0
Population density, 1990[3,4]	*Number*	29.0	36.3
Population change, 1980-90[4]	*Percent*	-.9	.6
Per capita income, 1989[4]	*Dollars*	10,737	13,580
Per capita transfer income, 1989[4]	*do.*	3,096	2,636
Black population, 1990[5]	*Percent*	12.0	8.0
Disabled population, 1990[6]	*do.*	13.7	10.2
Transfers/earned income, 1990[4]	*Ratio*	.53	.34

[1]No persons living in towns of 2,500 population or more. [2]Percentage of counties in group. [3]Persons per square mile. [4]Unweighted county averages. [5]Percent of persons; unweighted county averages. [6]Persons with a physical or mental health condition of at least 6 months duration that limited the kind or amount of work they could do.

Figure 22

Job growth in transfers-dependent and all-nonmetro counties

Jobs in transfers counties (total and services) grew over the 1980's, but at rates well under the all-nonmetro rates



Source: Rural Economy Division, ERS, USDA, using data from the Bureau of Economic Analysis.

References

Ahearn, Mary, and David Banker. "Urban Farming Has Financial Benefits," *Rural Development Perspectives*, Vol. 5, No. 1, Oct. 1988, pp. 19-21.

Ahearn, Mary, Susan Bentley, and Thomas Carlin. *Farming-Dependent Counties and the Financial Well-Being of Farm Operator Households*. AIB-544. U.S. Dept. Agr., Econ. Res. Serv., Aug. 1988.

Beale, Calvin L. "Prisons, Population, and Jobs in Nonmetro America," *Rural Development Perspectives*, Vol. 8, No. 3, June 1993, pp. 16-19.

Bender, Lloyd D., Bernal L. Green, Thomas F. Hady, John A. Kuehn, Marlys K. Nelson, Leon B. Perkinson, and Peggy J. Ross. *The Diverse Social and Economic Structure of Nonmetropolitan America*. RDRR-49. U.S. Dept. Agr., Econ. Res. Serv., Sept. 1985.

Bentley, Susan. "Farming Dependent Counties," *Fact Sheet*. U.S. Dept. Agr., Econ. Res. Serv., Nov. 1990.

Cook, Peggy J., and Thomas F. Hady. *Updating the ERS County Typology: A View From the 1980's*. Staff Report AGES9327. U.S. Dept. Agr., Econ. Res. Serv., Dec. 1993.

Deavers, Kenneth L. "1980's: A Decade of Broad Rural Stress," *Rural Development Perspectives*, Vol. 7, No. 3, June-Sept. 1991, pp. 1-5.

Deavers, Kenneth L., and David L. Brown. *Natural Resource Dependence, Rural Poverty*. RDRR-48. U.S. Dept. Agr., Econ. Res. Serv., May 1985.

Ghelfi, Linda M. (ed.). *Rural Conditions and Trends*, Vol. 4, No. 3, Fall 1993.

Green, Bernal L., and Thomas A. Carlin. *Agricultural Policy, Rural Counties and Political Geography*. Staff Report AGES850429. U.S. Dept. Agr., Econ. Res. Serv., May 1985.

Hady, Thomas F., and Peggy J. Ross. "Nonmetro Counties Less Dependent on Farming, Manufacturing, and Mining," *Rural Development Perspectives*, Vol. 6, No. 3, June-Sept. 1990, pp. 43-45.

Hady, Thomas F., and Peggy J. Ross. *An Update: The Diverse Social and Economic Structure of Nonmetropolitan America*. Staff Report AGES9036, U.S. Dept. Agr., Econ. Res. Serv., May 1990.

Henry, Mark, Mark Drabenstott, and Lynn Gibson. "A Changing Rural America," *Economic Review*, July-Aug. 1986, pp. 23-41.

Hoppe, Robert A. *Economic Structure and Change in Persistently Low-Income Nonmetro Counties*. RDRR-50. U.S. Dept. Agr., Econ. Res. Serv., Oct. 1985.

Hoppe, Robert A. *Farming Operations and Households in Farming Areas--A Closer Look*. AER- 685. U.S. Dept. Agr., Econ. Res. Serv., May 1994.

Ross, Peggy J. "The Changing Landscape of Rural America: Implications for Policy Planning," *Looking Ahead*, Vol. IX, No. 2, Spring 1986, pp. 6-10.

Ross, Peggy J. "Remarks on the Development of a Policy-Oriented Classification of Nonmetropolitan Counties," in *Rural People and Places: A Symposium on Typologies*. A. E. Luloff (ed.), Pub. No. 47, The Northeast Regional Center for Rural Development, Oct. 1986, pp. 177-180.

Ross, Peggy. J, and Bernal L. Green. *Procedures for Developing a Policy-Oriented Classification of Nonmetropolitan Counties*. Staff Report AGES850308. U.S. Dept. Agr., Econ. Res. Serv., Aug. 1985.

Salsgiver, Jacqueline, and Fred K. Hines. *Profiling Farming Counties Using Employment and Income-Based Measures*. Staff Report AGES9320. U. S. Dept. Agr., Econ. Res. Serv., Oct. 1993.

U.S. Department of Agriculture, Economic Research Service. "Developing Policies to Fit the Diversity of Rural America," *Farmline*, Vol. VI, No. 9, Sept.-Oct. 1985, pp. 8-10.

U.S. Department of Agriculture, Economic Research Service. "Rural America Shifts Away from Traditional Sources of Support," *Farmline News Service*, Sept. 1990, pp. 8-14.

Appendix: Data, Definitions, and Procedures

This appendix discusses the general approach and procedures used to develop the 1989 revised ERS typology. The ERS research team considered different models for revising the ERS typology ranging from doing a complete overhaul to updating the original 1979 typology while making only modest definitional changes. The team chose a middle-ground approach. Several initial decisions were made to guide the analysis:

- Retain the basic conceptual scheme of the original typology but expand it from 8 to 11 types to reflect several new themes believed to be important to a better understanding of rural diversity today.
- Employ a 1993 definition of nonmetro status.
- Use essentially the same data sources and procedures as used in the earlier typologies making some definitional and procedural changes that would improve the clarity and usefulness of the typology:

    a. Establish mutually exclusive economic types, making the typology more useful for quantitative statistical analyses.

    b. Extend the classification to include county equivalents in Alaska and Hawaii.

    c. Redefine the persistent poverty type using a poverty-based rather than an income-based measure.

    d. Use multi-year measures to define all the economic types.

Eleven types were identified for inclusion in the revised typology. Four types were retained from the original typology: farming-dependent, manufacturing-dependent, mining-dependent, and government-dependent. A fifth type, services-dependent counties, was added in response to the growing proliferation of services jobs in the national economy. The sixth type, nonspecialized counties, includes those counties whose economies did not meet the criteria for any of the major economic specializations.

Five additional policy types were identified. Three of the policy types--retirement-destination, Federal lands, and persistent poverty--were revised from the original typology. A commuting type was added to reflect county economies influenced by workers commuting to jobs in other counties, and a transfers-dependent type was added to identify county economies heavily reliant on income from government transfer payments.

Data Sources

Several data sources were used to implement an analysis following the criteria laid out above. Three-year annualized averages of earnings by industry obtained from the Local Area Personal Income Series produced by the Bureau of Economic Analysis (BEA) were used to define the six economic types and one of the policy types (transfers-dependent counties). BEA furnished ERS with unsuppressed estimates for all but 5 of 50 States--Alaska, Maine, Michigan, Ohio, and Wyoming. Public use estimates (with suppression) for these five States were utilized to cover as many of their counties as possible.

County-level data from the Bureau of the Census's decennial Censuses of Population were employed to define three of the policy types: retirement-destination, commuting, and persistent poverty. The Federal lands type was defined using data from the 1987 Natural Resources Inventory, produced by the Soil Conservation Service, U. S. Department of Agriculture.[1]

Data to perform the descriptive analysis of the various types were drawn from the data sources noted above and, additionally, from BEA's county employment estimates reported by industry and county unemployment estimates from the Bureau of Labor Statistics (BLS).

Procedures To Define the Types

The analysis to develop definitions for the 11 types and subsequently to classify 2,276 counties designated as nonmetro in 1993 according to these types involved several steps.

Establishing Cutting Points

The first step was to develop measures and establish cutting points for defining the types (excluding the persistent poverty category) from data drawn from the sources specified above (appendix table 1). The exact measures and the years covered are indicated in the definitions provided in the introduction section. Distributions of these measures were evaluated along with means and standard deviations to establish threshhold levels or cutting points. As with earlier typologies, the rule of mean plus one standard deviation was used as a rough guideline (along with

the researchers' judgment of the nature and relative importance of the various types) to establish the cutting points shown in appendix table 1. A cutting point for the persistent poverty type was selected by evaluating the use of two measures: poverty rates in excess of 20 percent or 25 percent in each of 4 selected years.

Adjusting for Economic Overlaps

The second step was to classify the counties according to the designated cutting points and implement procedures to establish the nonoverlapping economic types. Counties overlapping on one or more economic types were handled in the following manner. Counties that qualified as farming, mining, or manufacturing and also qualified as government and/or services counties were assigned to the farming, mining, or manufacturing types, respectively. Other overlaps such as farming-mining, mining-manufacturing, or government-services were assigned to the type with the largest percentage point difference above the cutting point divided by the standard deviation.

Following these procedures, we were able to classify 2,259 of the 2,276 nonmetro counties into one of the six economic types (appendix table 2.) As noted above, data were suppressed in some instances for some counties in five States. Data were available to classify most of these *suppressed data* counties into an economic type. However, 17 such counties that did not meet the definitional criteria for any economic type were omitted from the analysis.[2]

The number of nonmetro counties qualifying for one or more policy types was 1,197. The number of two-way overlaps of the policy types with the economic types and with other policy types appears in appendix table 3.

Appendix tables 4-18 report the detailed economic and socioeconomic statistics used to construct the descriptive profiles. These statistics are reported as either numbers, unweighted county averages, or aggregated values as indicated in the table footnotes. In a few instances, the profiles may contain statistics that do not appear in the tables.

Endnotes

[1]Data for Alaska were not available in this source. Therefore, the amount of land area in Federal ownership was estimated from detailed maps for county equivalents in Alaska.

[2]Although excluded from the main analysis, economic types were determined for the 17 counties using definitions based on single years or earlier years. Ten counties that qualified as nonspecialized are Haines, AK, Ketchikan Gateway, AK, Wrangell-Petersburg, AK, Hancock, ME, Washington, ME, Alcona, MI, Benzie, MI, Dickinson, MI, and Oceana, MI. Six counties--Valdez-Cordova, AK, Lincoln, ME, Leelanau, MI, Adams, OH, Ottawa, OH, Platte, WY--qualified as services-dependent. One county, Gntonagon, MI, qualified as mining-dependent.

Appendix table 1--Selected statistics for measures used to define county types

Measure[1]	Minimum value	Maximum value	Mean	Standard deviation	Selected cutting point[2]
			Percent		
Total labor and proprietors' income from:					
Farming	0	88.8	14.3	14.5	20
Mining	0	79.2	3.4	8.2	15
Manufacturing	0	82.3	18.0	15.0	30
Government	2.1	76.8	18.1	8.3	25
Services[3]	2.4	77.9	40.2	10.5	50
Increase in elderly population from inmovement	-47.7	120.9	2.9	11.5	15
Land area Federally owned	0	98.7	9.5	19.0	30
Workers commuting to jobs outside county of residence	1.5	84.0	25.2	15.2	40
Personal income from transfer payments	3.6	44.7	20.1	5.5	25

[1]See definitions for exact measures. Information pertains to all types except persistent poverty and nonspecialized counties.
[2]Cutting points were established using mean plus one standard deviation as a rough guideline coupled with researchers' judgment of the nature and relative importance of the type.
[3]Includes transportation and public utilities; wholesale trade; retail trade; finance, insurance, and real estate; services; and agricultural services.

Appendix table 2--Count of nonmetro counties for selected cutting points by county type

County type[1]	Cutoff[2]	≥ Cutoff	Overlaps[3]		Final counts
			Retained	Reassigned	
	Percent	*Number of counties*			
Farming	20	565	71	9	556
Mining	15	151	22	5	146
Manufacturing	30	510	24	4	506
Government	25	323	18	79	244
Services	50	370	8	47	323
Nonspecialized	NA	NA	NA	NA	484
Total	NA	1,775	143	144	2,259[4]
Retirement	15	190	NA	NA	190
Federal lands	30	270	NA	NA	270
Commuting	40	381	NA	NA	381
Persistent poverty	20	535	NA	NA	535
Transfers	25	381	NA	NA	381
Total	NA	1,197	NA	NA	1,197[5]

NA = Not Applicable.

[1]The six economic types are defined as mutually exclusive (nonoverlapping) categories. The five policy types are defined as overlapping categories (with each other and with the economic types).

[2]Selected cutting points used to define types (see definitions).

[3]The procedure of establishing nonoverlapping (mutually exclusive) economic types was as follows: farming, mining, and manufacturing counties also qualifying as a government or services county were assigned to farming, mining, or manufacturing, respectively. Other overlaps such as farming-mining, mining-manufacturing, or government-services were assigned to the type with the largest percentage point difference above the cutting point divided by the standard deviation.

[4]Number of nonmetro counties that qualify for one of the six economic types, including counties with missing data (suppressed or unavailable) in one or more sectors. Seventeen counties with missing data that did not qualify for another sector are excluded.

[5]Number of nonmetro counties qualifying for one or more policy types. An additional 1,079 counties did not qualify as one of the policy types.

Appendix table 3--Overlaps[1] among types

County type	Retirement	Federal lands	Commuting	Persistent poverty	Transfers
			Number		
Farming	20	41	82	135	63
Mining	6	34	17	27	37
Manufacturing	15	31	82	119	38
Government	27	61	43	84	89
Services	70	60	35	45	50
Nonspecialized[2]	48	38	119	124	99
Retirement	--	58	36	23	48
Federal lands	--	--	31	27	48
Commuting	--	--	--	109	62
Persistent poverty	--	--	--	--	233
Transfers	--	--	--	--	--

-- = Duplicative values.
[1]Two-way overlaps.
[2]Of the 484 nonspecialized counties, 199 were not classified in any of the policy types.

Appendix table 4--Distribution of nonmetro population, earnings, jobs and counties by county type[1]

County type	Counties 1993[2]	Population 1990	Jobs 1989	Earnings 1989
	Number	*Thousands*	*Millions*	*Dollars*
Farming	556	4,647	2.1	39.2
Mining	146	2,847	1.2	24.9
Manufacturing	506	15,768	7.7	145.6
Government	244	6,571	3.0	55.0
Services	323	9,594	4.9	87.5
Nonspecialized	484	11,105	4.9	85.8
Retirement	190	5,205	2.4	41.7
Federal lands	270	5,425	2.7	50.3
Commuting	381	6,048	2.2	37.3
Persistent poverty	535	9,564	3.9	65.7
Transfers	381	6,658	2.4	40.4
All-nonmetro	2,276	50,898	24.0	441.7
		Percent		
Farming	24.4	9.1	8.8	8.9
Mining	6.4	5.6	4.9	5.6
Manufacturing	22.2	31.0	32.1	33.0
Government	10.7	12.9	12.5	12.4
Services	14.2	18.8	20.3	19.8
Nonspecialized	21.3	21.8	20.6	19.4
All-nonmetro	100.0	100.0	100.0	100.0

[1]With the exception of number and percent of counties, values are aggregated data or calculated from aggregated data. Values for the economic types do not sum to the all-nonmetro value because of the omission of 17 counties with missing data. Values for the policy types reflect overlapping structure of these types.

[2]Nonmetro status designated as of 1993 Census.

Source: All measures were calculated by ERS using data from the Bureau of Economic Analysis and Bureau of the Census.

Appendix table 5--Distribution of nonmetro counties and population by region and county type, 1990

County type	Region			
	Northeast	Midwest	South	West
	Percent of counties			
Farming	0	52.5	31.0	16.5
Mining	1.4	14.4	55.4	28.8
Manufacturing	5.9	29.4	60.9	3.8
Government	5.8	24.2	43.0	27.0
Services	7.7	38.1	32.8	21.4
Nonspecialized	4.3	37.2	48.8	9.7
Retirement	2.1	15.8	50.0	32.1
Federal lands	.7	6.3	17.0	76.0
Commuting	3.4	27.6	64.0	5.0
Persistent poverty	0	11.4	82.8	5.8
Transfers	1.0	25.7	63.9	9.4
All-nonmetro	4.2	36.6	44.3	14.9
	Percent of population			
Farming	0	45.9	33.8	20.3
Mining	4.6	11.2	62.2	22.0
Manufacturing	11.0	33.0	52.3	3.7
Government	14.9	22.3	38.3	24.5
Services	14.1	31.3	32.2	22.4
Nonspecialized	8.7	33.1	46.2	12.0
Retirement	3.3	10.6	44.1	42.0
Federal lands	1.5	3.7	18.0	76.8
Commuting	10.1	30.1	56.3	3.5
Persistent poverty	0	6.8	85.7	7.5
Transfers	2.1	21.6	66.4	9.9
All-nonmetro	10.4	31.4	43.9	14.3

Source: All measures were calculated by ERS using data from the Bureau of Economic Analysis and Bureau of the Census.

Appendix table 6--Nonmetro population change and migration rate by region and county type, 1980-90[1]

County type	Region				All regions
	Northeast	Midwest	South	West	
			Population change rate		
Farming	0	-10.0	-4.7	-1.2	-6.9
Mining	-2.4	-2.5	-3.9	6.8	-.6
Manufacturing	1.6	-.5	2.3	3.6	1.5
Government	5.6	.6	6.1	11.3	6.2
Services	11.4	-2.8	8.5	17.2	6.3
Nonspecialized	4.0	-2.4	3.2	9.1	1.7
Retirement	28.3	14.8	22.9	26.0	22.7
Federal lands	4.3	-1.5	8.4	10.0	9.0
Commuting	9.7	-.7	5.5	20.9	4.7
Persistent poverty	0	-4.9	-1.5	9.0	-1.3
Transfers	-3.6	-1.7	-1.8	7.3	-.9
All-nonmetro	5.5	-4.5	1.9	7.8	.6
			Net migration rate		
Farming	0	-13.1	-8.7	-8.5	-11.0
Mining	-5.5	-6.3	-10.8	-6.2	-8.8
Manufacturing	-2.4	-5.4	-2.0	-4.9	-3.1
Government	1.4	-4.7	-.2	-.4	-1.3
Services	7.1	-5.9	4.9	6.6	1.3
Nonspecialized	-.1	-5.5	-.6	1.0	-2.2
Retirement	23.9	12.7	20.1	17.9	18.3
Federal lands	2.2	-4.6	4.5	-.6	.1
Commuting	4.2	-4.1	1.5	9.4	.5
Persistent poverty	0	-10.3	-6.7	-5.2	-7.0
Transfers	-5.2	-4.4	-5.6	-.4	-4.8
All-nonmetro	1.4	-8.1	-2.6	-2.0	-4.4

[1]Unweighted county averages.
Source: All measures were calculated by ERS using data from Bureau of the Census.

Appendix table 7--Urbanization characteristics for nonmetro counties by county type

County type	Total urban population and metro adjacency, 1993[1]						Adjacent to metro area, 1993	Population size, 1990[2]
	20,000 or more		2,500 to 19,999		less than 2,500			
	Adjacent	Nonadjacent	Adjacent	Nonadjacent	Adjacent	Nonadjacent		
	Percent of counties							*Number*
Farming	0.5	0.4	11.4	21.0	14.4	52.3	26.3	8,358
Mining	3.4	4.8	19.2	39.0	11.0	22.6	33.6	19,498
Manufacturing	11.5	3.8	38.5	28.3	8.3	9.7	58.3	31,162
Government	10.2	10.2	23.0	27.5	9.0	20.1	42.2	26,931
Services	6.2	13.3	22.9	39.9	7.7	10.0	36.8	29,703
Nonspecialized	4.5	3.5	39.7	26.2	12.6	13.5	56.8	22,945
Retirement	6.8	4.8	27.4	22.1	14.7	24.2	48.9	27,396
Federal lands	5.6	8.1	13.3	36.0	7.4	29.6	26.3	20,091
Commuting	1.3	0	32.8	6.6	34.6	24.7	68.7	15,873
Persistent poverty	2.5	2.6	25.0	30.7	11.2	28.0	38.7	17,876
Transfers	1.8	1.6	19.9	32.0	8.7	36.0	30.4	17,475
All-nonmetro	5.8	5.0	26.8	28.4	10.9	23.1	43.5	22,363

[1]Urban population refers to persons living in incorporated and unincorporated towns and cities of at least 2,500 inhabitants. Counties with fewer than 2,500 urban residents are defined as totally rural.

[2]Unweighted county averages.

Source: All measures were calculated by ERS using data from Bureau of the Census.

Appendix table 8--Population characteristics for nonmetro counties by county type[1]

County type	Land area, 1990	Persons per square mile, 1990	Persons aged 65 and over, 1990	Population growth by age group, 1980-90			
				All persons	18-34	35-64	65+
	Square miles	*Number*	*Percent*	*Population change rate*			
Farming	1,048	11.8	18.3	-6.9	-17.4	.5	6.4
Mining	1,625	31.8	13.1	-.6	-13.6	14.7	16.8
Manufacturing	639	59.2	14.7	1.5	-4.9	12.7	15.2
Government	3,508	38.4	13.7	6.2	-2.4	20.7	21.2
Services	1,097	43.4	16.2	6.3	-6.0	19.9	21.3
Nonspecialized	874	36.0	16.4	1.7	-5.9	11.9	12.3
Retirement	1,370	38.3	17.8	22.7	9.3	35.4	45.4
Federal lands	4,312	15.4	13.6	9.0	-9.0	27.7	32.7
Commuting	530	35.0	14.8	4.7	-1.1	17.3	14.9
Persistent poverty	1,571	29.7	15.0	-1.3	-5.7	9.8	8.2
Transfers	1,792	29.0	16.8	-.9	-6.7	9.2	10.4
All-nonmetro	1,256	36.3	15.9	.6	-8.7	11.6	14.1

[1]Unweighted county averages.
Source: All measures were calculated by ERS using data from Bureau of the Census.

Appendix table 9--Demographic characteristics for nonmetro counties by county type, 1990[1]

County type	Racial and ethnic composition		Households headed by females[3]	Disabled population aged 16-64 not institutionalized[4]	Dependent populations[5]	Persons aged 25 and over who completed high school	High school dropouts[6]	Persons in poverty
	Black[2]	Hispanic						
	Percent				*Ratio*	*Percent*		
Farming	4.9	6.0	4.1	8.9	0.87	69.3	9.3	18.9
Mining	2.9	10.1	5.1	11.1	.74	65.1	11.9	20.1
Manufacturing	13.0	1.1	5.9	10.6	.71	64.2	12.7	16.9
Government	9.0	8.0	6.2	10.7	.70	68.8	10.9	21.0
Services	5.1	3.7	5.2	9.8	.74	72.4	9.9	16.5
Nonspecialized	9.6	2.7	5.5	10.8	.77	66.1	11.6	18.7
Retirement	5.2	6.7	4.9	11.3	.75	70.3	12.7	16.3
Federal lands	1.8	6.8	4.9	10.1	.74	74.9	10.6	15.8
Commuting	13.0	2.0	5.3	11.1	.72	63.9	12.3	18.1
Persistent poverty	21.2	7.8	7.5	12.4	.78	56.6	14.3	29.1
Transfers	12.0	5.8	6.7	13.7	.80	59.2	13.2	27.5
All-nonmetro	8.0	4.3	5.2	10.2	.77	67.7	11.0	18.3

[1]Unweighted county averages.
[2]Blacks of non-Hispanic origin.
[3]Percent of households with female householder, no husband present and own children under 18 years old.
[4]Persons with a physical or mental health condition lasting 6 or more months that limited the kind or amount of work they could do.
[5]Persons aged 17 or younger and persons aged 65 or older to persons aged 18-64.
[6]Percent of civilians age 16-19 not enrolled in school and not a high school graduate.
Source: All measures were calculated by ERS using data from Bureau of the Census.

Appendix table 10--Income characteristics for nonmetro counties by county type, 1989[1,2]

County type	Per capita income	Per capita transfer income	Per capita earnings	Median family income	Personal income from--			Transfer payments to earned income
					Earnings	Transfers	Property	
	Dollars				*Percent*			*Ratio*
Farming	14,743	2,651	9,166	24,394	61.5	18.7	19.9	0.32
Mining	13,081	2,567	8,502	26,114	63.4	20.3	16.3	.34
Manufacturing	13,081	2,455	8,672	26,936	66.1	19.2	14.7	.30
Government	12,118	2,753	7,467	25,301	61.0	23.6	15.4	.41
Services	14,384	2,721	8,650	27,677	59.9	19.7	20.5	.34
Nonspecialized	13,004	2,695	7,939	25,591	60.9	21.3	17.9	.36
Retirement	13,698	2,876	7,773	26,657	56.6	21.7	21.7	.40
Federal lands	13,807	2,582	8,823	27,923	63.1	19.6	17.3	.33
Commuting	12,579	2,445	8,236	26,117	65.1	20.1	14.8	.32
Persistent poverty	11,056	2,705	6,749	20,731	60.6	24.9	14.4	.42
Transfers	10,737	3,096	5,942	20,358	55.4	29.0	15.6	.53
All-nonmetro	13,580	2,636	8,508	25,949	62.2	20.1	17.6	.34

[1]Unweighted county averages.

[2]The income characteristics are reported for place of residence (versus place of work) and thus reflect the well-being of residents rather than the well-being of the local economies.

Source: All measures were calculated by ERS using data from the Bureau of Economic Analysis and Bureau of the Census.

Appendix table 11--Employment characteristics for nonmetro counties by county type

County type	Unemployment rate, 1989[1]	Workers commuting outside county of residence, 1990[1]	Goods to service jobs, 1989[1]	Jobs to population, 1989[1,2]	County job growth, 1979-89		
					Fast[3]	Some	None/declining
	Percent		*Ratio*		*Percent of counties*		
Farming	5.5	23.5	0.62	0.47	3.8	26.8	69.4
Mining	8.0	22.1	.60	.46	13.0	38.4	48.6
Manufacturing	6.8	27.8	.81	.48	15.6	63.2	21.1
Government	7.6	24.1	.30	.42	22.6	55.6	21.8
Services	6.2	20.7	.28	.52	35.0	36.2	28.8
Nonspecialized	6.8	29.2	.52	.44	14.0	53.3	32.6
Retirement	6.6	25.6	.33	.43	59.8	37.6	2.6
Federal lands	7.1	18.4	.43	.50	33.5	44.6	21.9
Commuting	7.1	50.9	.64	.35	19.9	52.5	27.6
Persistent poverty	8.5	28.4	.60	.39	10.1	49.5	40.4
Transfers	9.7	27.6	.50	.37	12.1	47.8	40.2
All-nonmetro	6.6	25.2	.56	.47	16.0	45.8	38.2

[1]Unweighted county averages.
[2]Total jobs relative to civilian noninstitutionalized persons aged 16-64.
[3]Fast growth is growth rate greater than or equal to the average for U.S. growing counties (22.29).
Source: All measures were calculated by ERS using data from the Bureau of Economic Analysis, the Bureau of Labor Statistics and Bureau of the Census.

Appendix table 12--Earnings per county for nonmetro counties by industrial sector and county type, 1989[1]

County type	Industrial sector						All industries
	Farming	Mining	Manufacturing	Government	Trade/Services	Other[2]	
	Thousand dollars						
Farming	23,008	779	6,692	11,400	24,145	4,427	70,451
Mining	5,911	48,765	12,493	25,735	68,663	9,659	170,507
Manufacturing	13,712	2,202	114,778	38,072	101,906	17,129	287,699
Government	9,234	2,657	25,374	84,465	88,436	14,640	225,274
Services	14,131	4,171	36,279	41,889	151,104	23,296	270,871
Nonspecialized	16,354	3,772	37,189	29,188	76,744	14,033	177,260
Retirement	12,718	2,899	31,980	41,397	108,463	22,595	219,234
Federal lands	11,600	8,555	27,290	39,465	83,527	16,055	186,334
Commuting	10,197	2,317	22,854	16,490	38,158	7,964	97,802
Persistent poverty	11,610	4,310	26,164	24,758	48,041	7,392	122,821
Transfers	7,971	7,097	15,464	22,947	45,597	6,600	106,116
All-nonmetro	15,563	5,524	44,102	34,388	80,910	13,613	194,080
	Percent						
Farming	36.2	1.3	6.7	16.3	33.6	5.9	100.0
Mining	6.3	29.0	6.1	16.1	36.6	5.9	100.0
Manufacturing	6.3	.9	40.2	13.9	33.1	5.6	100.0
Government	7.0	2.0	10.4	35.0	39.1	6.5	100.0
Services	7.4	2.0	10.9	16.2	55.1	8.4	100.0
Nonspecialized	11.3	2.2	19.1	17.3	42.1	8.0	100.0
Retirement	8.9	1.8	13.5	19.8	45.8	10.2	100.0
Federal lands	10.7	6.3	12.8	22.2	40.0	8.0	100.0
Commuting	14.2	2.7	18.8	19.1	37.4	7.8	100.0
Persistent poverty	14.8	3.2	18.0	20.3	37.6	6.1	100.0
Transfers	11.2	4.7	14.5	22.7	40.6	6.3	100.0
All-nonmetro	14.9	3.3	17.8	18.0	39.2	6.8	100.0

[1]Unweighted county averages.
[2]Other includes agricultural services, forestry, fisheries, and construction.
Source: All measures were calculated by ERS using data from the Bureau of Economic Analysis.

Appendix table 13--Jobs per county for nonmetro counties by industrial sector and county type, 1989[1]

County type	Industrial sector						All industries
	Farming	Mining	Manufacturing	Government	Trade/Services	Other[2]	
				Number			
Farming	831	35	351	657	1,645	275	3,794
Mining	429	1,258	557	1,361	4,034	468	8,068
Manufacturing	966	87	4,609	2,024	6,627	875	15,182
Government	642	87	1,135	3,909	5,820	717	12,298
Services	880	148	1,617	2,134	9,108	1,145	15,030
Nonspecialized	1,031	155	1,708	1,576	5,033	711	10,213
Retirement	670	88	1,435	1,988	7,149	1,169	12,454
Federal lands	569	221	1,128	1,852	5,303	822	9,797
Commuting	708	76	1,059	921	2,511	426	5,691
Persistent poverty	728	136	1,315	1,388	3,188	438	7,192
Transfers	616	200	806	1,251	3,139	397	6,380
All-nonmetro	862	174	1,873	1,767	5,162	693	10,523
				Percent			
Farming	26.3	1.2	6.9	17.9	41.0	6.7	100.0
Mining	8.5	17.3	5.8	17.2	45.2	6.0	100.0
Manufacturing	8.4	.6	31.2	14.0	40.2	5.6	100.0
Government	9.1	1.2	9.0	29.4	45.1	6.2	100.0
Services	8.8	1.3	9.3	14.6	58.5	7.5	100.0
Nonspecialized	13.2	1.6	15.8	15.9	46.5	7.0	100.0
Retirement	8.4	1.0	11.2	16.9	53.1	9.4	100.0
Federal lands	9.4	3.6	10.5	20.5	48.3	7.7	100.0
Commuting	15.9	1.6	16.4	17.8	40.9	7.4	100.0
Persistent poverty	15.0	1.9	16.1	19.3	41.4	6.3	100.0
Transfers	13.2	2.7	12.8	20.1	45.0	6.2	100.0
All-nonmetro	13.9	2.2	14.8	17.3	45.2	6.6	100.0

[1]Unweighted county averages.
[2]Other includes agricultural services, forestry, fisheries, and construction.
Source: All measures were calculated by ERS using data from the Bureau of Economic Analysis.

Appendix table 14--Total earnings for nonmetro counties by industrial sector and county type[1]

County type	Industrial sector						All industries
	Farming	Mining	Manufacturing	Government	Trade/Services	Other[2]	
	Real thousand dollars[3]						
1979:							
Farming	13,680,120	567,292	4,029,837	5,634,396	14,318,928	3,488,466	41,719,040
Mining	1,101,227	10,453,001	2,252,018	3,227,639	9,970,010	2,621,413	29,625,307
Manufacturing	8,104,286	1,558,939	56,985,342	16,579,317	44,582,647	9,513,381	137,323,912
Government	2,492,216	1,791,530	6,340,751	16,903,686	17,937,480	4,032,842	49,498,505
Services	5,662,254	2,286,705	13,605,150	11,177,793	39,506,667	8,430,245	80,668,814
Nonspecialized	9,328,616	2,990,816	19,171,350	11,972,761	33,697,827	8,082,716	85,244,087
Retirement	2,150,330	647,945	5,862,100	6,041,815	14,553,253	3,817,562	33,073,004
Federal lands	2,797,607	3,427,376	8,030,013	8,924,392	18,676,728	5,258,881	47,114,997
Commuting	4,306,106	1,382,974	8,620,915	5,286,758	12,225,839	3,288,918	35,111,510
Persistent Poverty	7,623,753	4,060,667	13,402,690	11,082,054	23,930,980	5,515,026	65,615,170
Transfers	3,864,851	5,025,107	7,127,796	7,740,792	16,818,766	3,707,934	44,285,247
All-nonmetro	40,449,594	19,760,737	103,118,495	66,049,394	161,239,747	36,618,194	427,236,161
1989:							
Farming	12,792,665	433,286	3,720,817	6,338,575	13,424,460	2,461,135	39,170,938
Mining	863,052	7,119,620	1,811,515	3,757,254	9,818,760	1,400,595	24,894,049
Manufacturing	6,938,017	1,100,965	58,077,711	19,264,553	51,258,592	8,547,123	145,575,789
Government	2,243,907	621,734	6,089,665	20,609,404	20,782,444	3,513,573	54,966,820
Services	4,564,417	1,347,308	11,718,059	13,530,023	48,806,706	7,524,657	87,491,170
Nonspecialized	7,915,212	1,825,624	17,999,377	14,127,199	37,144,014	6,778,102	85,793,888
Retirement	2,416,470	547,883	6,076,204	7,865,364	20,499,476	4,225,205	41,654,450
Federal lands	3,120,389	2,250,052	7,286,497	10,655,401	21,800,456	4,270,520	50,310,088
Commuting	3,884,912	875,725	8,707,281	6,282,854	14,423,825	2,994,586	37,262,525
Persistent poverty	6,210,848	2,292,976	13,919,140	13,245,629	25,509,534	3,932,315	65,709,312
Transfers	3,036,887	2,625,845	5,845,341	8,742,825	16,962,035	2,461,626	40,430,039
All-nonmetro	35,404,940	12,462,058	100,156,397	78,267,270	182,452,598	30,766,307	441,726,020
	Percent change, 1979-89						
Farming	-6.5	-23.6	-7.7	12.5	-6.2	-29.4	-6.1
Mining	-21.6	-31.9	-19.6	16.4	-1.5	-46.6	-16.0
Manufacturing	-14.4	-29.4	1.9	16.2	15.0	-10.2	6.0
Government	-10.0	-65.3	-4.0	21.9	15.9	-12.9	11.0
Services	-19.4	-41.1	-13.9	21.0	23.5	-10.7	8.5
Nonspecialized	-15.2	-39.0	-6.1	18.0	10.2	-16.1	.6
Retirement	12.4	-15.4	3.7	30.2	40.9	10.7	25.9
Federal lands	11.5	-34.4	-9.3	19.4	16.7	-18.8	6.8
Commuting	-9.8	-36.7	1.0	18.8	18.0	-8.9	6.1
Persistent poverty	-18.5	-43.5	3.9	19.5	6.6	-28.7	.1
Transfers	-21.4	-47.7	-18.0	12.9	.9	-33.6	-8.7
All-nonmetro	-12.5	-36.9	-2.9	18.5	13.2	-16.0	3.4

[1]Aggregated dollars or calculated from aggregated data. Values may not sum to the all industries value due to missing data within the industries.
[2]Other includes agricultural services, forestry, fisheries, and construction.
[3]Values are converted to 1989 dollars using the PCI deflator.
Source: All measures were calculated by ERS using data from the Bureau of Economic Analysis.

Appendix table 15--Total jobs for nonmetro counties by industrial sector and county type[1]

County type	Industrial sector						All industries
	Farming	Mining	Manufacturing	Government	Trade/Services	Other[2]	
				Number			
1979:							
Farming	573,107	21,013	188,957	342,926	847,054	152,461	2,134,266
Mining	74,654	255,851	91,764	179,788	466,323	74,722	1,196,143
Manufacturing	618,009	50,196	2,269,057	954,108	2,277,605	341,550	6,953,502
Government	186,873	43,029	273,614	839,658	851,693	119,119	2,567,380
Services	343,492	65,185	563,691	613,008	2,141,143	308,046	4,119,551
Nonspecialized	612,824	93,082	827,113	696,924	1,908,846	304,026	4,539,498
Retirement	145,482	17,825	248,951	317,768	818,759	147,172	1,761,851
Federal lands	170,166	81,358	292,455	437,030	949,463	164,919	2,214,973
Commuting	331,813	38,764	393,247	319,946	660,117	121,127	1,965,358
Persistent poverty	502,400	106,088	666,180	669,180	1,446,625	235,171	3,640,883
Transfers	277,834	125,488	331,492	446,566	877,817	136,359	2,344,567
All-nonmetro	2,418,059	530,874	4,237,684	3,652,054	8,492,664	1,299,924	21,655,266
1989:							
Farming	461,811	19,441	195,339	365,492	914,348	152,967	2,109,406
Mining	62,601	183,633	80,733	198,763	576,918	67,817	1,177,915
Manufacturing	488,603	43,171	2,332,032	1,024,009	3,333,221	436,775	7,682,247
Government	156,736	20,199	272,302	953,897	1,355,992	170,742	3,000,687
Services	284,132	47,213	522,283	689,131	2,941,891	369,870	4,854,535
Nonspecialized	499,039	74,505	826,831	762,801	2,435,881	344,152	4,943,216
Retirement	127,235	15,952	272,730	377,778	1,351,233	219,702	2,366,293
Federal lands	153,666	57,301	301,126	499,996	1,378,749	217,834	2,645,303
Commuting	269,616	28,538	403,428	350,945	949,090	160,231	2,168,195
Persistent poverty	389,638	72,487	699,329	742,727	1,692,644	233,136	3,847,770
Transfers	234,616	72,495	304,822	476,474	1,164,718	148,390	2,430,906
All-nonmetro	1,960,659	388,539	4,254,307	4,022,374	11,624,585	1,565,045	23,950,110
				Percent change, 1979-89			
Farming	-19.4	-7.5	3.4	6.6	7.9	.3	-1.2
Mining	-16.1	-28.2	-12.0	10.6	23.7	-9.2	-1.5
Manufacturing	-20.9	-14.0	2.8	7.3	46.3	27.9	10.5
Government	-16.1	-53.1	-.5	13.6	59.2	43.3	16.9
Services	-17.3	-27.6	-7.3	12.4	37.4	20.1	17.8
Nonspecialized	-18.6	-20.0	0	9.5	27.6	13.2	8.9
Retirement	-12.5	-10.5	9.6	18.9	65.0	49.3	34.3
Federal lands	-9.7	-29.6	3.0	14.4	45.2	32.1	19.4
Commuting	-18.7	-26.4	2.6	9.7	43.8	32.3	10.3
Persistent poverty	-22.4	-31.7	5.0	11.0	17.0	-.9	5.7
Transfers	-15.6	-42.2	-8.0	6.7	32.7	8.8	3.7
All-nonmetro	-18.9	-26.8	.4	10.1	36.9	20.4	10.6

[1]Aggregated numbers or calculated from aggregated data. Values may not sum to the all industries value due to missing data within the industries.
[2]Other includes agricultural services, forestry, fisheries, and construction.
Source: All measures were calculated by ERS using data from the Bureau of Economic Analysis.

Appendix table 16--Earnings per job and change in earnings per job by industrial sector and county type[1]

County type	Industrial sector						All industries
	Farming	Mining	Manufacturing	Government	Trade/Services	Other[2]	
				Real earnings per job[3]			
1979:							
Farming	23,870	26,997	21,327	16,430	16,754	22,708	19,547
Mining	14,751	40,856	24,541	17,952	19,599	30,696	24,767
Manufacturing	13,114	31,057	25,114	17,377	16,683	24,405	19,749
Government	13,336	41,635	23,174	20,132	16,738	26,438	19,280
Services	16,484	35,080	24,136	18,234	17,837	26,397	19,582
Nonspecialized	15,222	32,131	23,179	17,179	16,905	25,563	18,778
Retirement	14,781	36,350	23,547	19,013	16,631	24,349	18,772
Federal lands	16,440	42,127	27,457	20,421	17,869	27,861	21,271
Commuting	12,978	35,677	21,922	16,524	16,330	24,746	17,865
Persistent poverty	15,175	38,276	20,119	16,561	16,393	23,248	18,022
Transfers	13,911	40,045	21,502	17,334	16,663	24,103	18,888
All-nonmetro	16,728	37,223	24,334	18,086	17,185	25,539	19,729
1989:							
Farming	27,701	22,287	19,048	17,343	14,682	16,089	18,570
Mining	13,787	38,771	22,438	18,903	17,019	20,653	21,134
Manufacturing	14,200	25,502	24,904	18,813	15,378	19,569	18,950
Government	14,316	30,780	22,364	21,605	15,326	20,578	18,318
Services	16,064	28,537	22,436	19,633	16,590	20,344	18,023
Nonspecialized	15,861	24,503	21,769	18,520	15,249	19,695	17,356
Retirement	18,992	34,346	22,279	20,820	15,171	19,232	17,603
Federal lands	20,306	39,267	24,198	21,311	15,812	19,604	19,019
Commuting	14,409	30,686	21,583	17,903	15,198	18,689	17,186
Persistent poverty	15,940	31,633	19,904	17,834	15,071	16,867	17,077
Transfers	12,944	36,221	19,176	18,349	14,563	16,589	16,632
All-nonmetro	18,058	32,074	23,542	19,458	15,695	19,658	18,444
				Percent change, 1979-89			
Farming	16.0	-17.4	-10.7	5.6	-12.4	-29.1	-5.0
Mining	-6.5	-5.1	-8.6	5.3	-13.2	-32.7	-14.7
Manufacturing	8.3	-17.9	-.8	8.3	-7.8	-19.8	-4.0
Government	7.3	-26.1	-3.5	7.3	-8.4	-22.2	-5.0
Services	-2.5	-18.7	-7.0	7.7	-7.0	-22.9	-8.0
Nonspecialized	4.2	-23.7	-6.1	7.8	-9.8	-23.0	-7.6
Retirement	28.5	-5.5	-5.4	9.5	-8.8	-21.0	-6.2
Federal lands	23.5	-6.8	-11.9	4.4	-11.5	-29.6	-10.6
Commuting	11.0	-14.0	-1.5	8.3	-6.9	-24.5	-3.8
Persistent poverty	5.0	-17.4	-1.1	7.7	-8.1	-27.4	-5.2
Transfers	-6.9	-9.5	-10.8	5.9	-12.6	-31.2	-11.9
All-nonmetro	7.9	-13.8	-3.3	7.6	-8.7	-23.0	-6.5

[1]Calculated from aggregated data reported in Appendix tables 14 and 15.
[2]Other includes agricultural services, forestry, fisheries, and construction.
[3]Calculated from converted 1989 dollars using the PCI deflator.
Source: All measures were calculated by ERS using data from the Bureau of Economic Analysis.

Appendix table 17--Economic county types by State, 1989

State	Economic type						All-nonmetro
	Farming	Mining	Manufacturing	Government	Services	Nonspecialized	
				Number			
Alabama	2	1	27	3	0	13	46
Alaska	0	0	0	8	0	1	13
Arizona	1	2	0	4	2	1	10
Arkansas	26	0	18	1	4	15	64
California	6	0	0	7	6	5	24
Colorado	17	6	0	6	20	4	53
Connecticut	0	0	1	0	0	1	2
Delaware	0	0	0	0	0	1	1
Florida	5	0	4	11	9	4	33
Georgia	17	3	48	12	7	30	117
Hawaii	0	0	0	0	3	0	3
Idaho	18	3	7	4	7	3	42
Illinois	7	7	8	7	23	22	74
Indiana	3	1	30	3	5	13	55
Iowa	41	0	11	2	9	26	89
Kansas	44	1	7	5	14	25	96
Kentucky	9	18	24	10	7	30	98
Louisiana	8	4	8	6	6	8	40
Maine	0	0	5	3	1	1	13
Maryland	0	0	1	2	6	0	9
Massachusetts	0	0	0	0	3	0	3
Michigan	2	2	17	17	5	8	58
Minnesota	29	0	10	6	7	17	69
Mississippi	11	0	29	5	10	20	75
Missouri	13	1	10	6	24	39	93
Montana	21	7	1	7	14	4	54
Nebraska	70	0	4	0	7	6	87
Nevada	0	8	0	2	3	1	14
New Hampshire	0	0	2	0	5	0	7
New Jersey	0	0	0	0	0	0	0
New Mexico	7	4	1	10	3	2	27
New York	0	0	7	9	5	3	24
North Carolina	6	0	33	7	6	13	65
North Dakota	28	3	1	2	11	4	49
Ohio	0	5	36	1	2	3	49
Oklahoma	19	4	4	13	7	16	63
Oregon	8	0	5	1	3	10	27
Pennsylvania	0	2	14	1	5	12	34
Rhode Island	0	0	0	1	0	0	1
South Carolina	1	0	25	1	1	2	30
South Dakota	49	1	0	6	6	1	63
Tennessee	1	0	48	2	4	14	69
Texas	65	30	11	19	24	47	196
Utah	3	4	1	7	5	5	25
Vermont	0	0	1	0	6	4	11
Virginia	2	4	21	4	9	19	59
Washington	11	0	4	1	2	9	27
West Virginia	0	17	7	9	6	4	43
Wisconsin	6	0	15	4	10	16	51
Wyoming	0	8	0	9	1	2	21
All States	556	146	506	244	323	484	2,276

Source: All measures were calculated by ERS using data from the Bureau of Economic Analysis.

Appendix table 18--Policy county types by State, 1989

State	Policy type					All-nonmetro
	Retirement	Federal lands	Commuting	Persistent poverty	Transfers	
	Number					
Alabama	0	0	9	24	9	46
Alaska	1	10	0	3	3	13
Arizona	5	7	0	3	3	10
Arkansas	7	8	8	31	26	64
California	11	14	0	0	5	24
Colorado	10	33	6	7	10	53
Connecticut	0	0	2	0	0	2
Delaware	1	0	0	0	0	1
Florida	19	3	10	12	13	33
Georgia	9	8	51	64	12	117
Hawaii	3	0	0	0	0	3
Idaho	2	32	2	1	1	42
Illinois	0	1	18	4	8	74
Indiana	0	1	18	0	0	55
Iowa	0	0	7	0	0	89
Kansas	0	0	9	0	2	96
Kentucky	1	3	33	54	33	98
Louisiana	0	1	8	33	21	40
Maine	1	0	2	0	1	13
Maryland	2	0	1	0	0	9
Massachusetts	1	0	0	0	0	3
Michigan	15	7	12	1	26	58
Minnesota	1	2	4	2	10	69
Mississippi	0	1	20	62	27	75
Missouri	8	1	14	26	23	93
Montana	3	23	1	3	4	54
Nebraska	0	0	3	2	1	87
Nevada	6	13	2	0	0	14
New Hampshire	1	1	0	0	0	7
New Jersey	0	0	0	0	0	0
New Mexico	4	12	3	13	7	27
New York	0	0	3	0	0	24
North Carolina	17	8	15	19	4	65
North Dakota	0	1	0	7	7	49
Ohio	0	0	11	2	10	49
Oklahoma	1	0	5	20	28	63
Oregon	6	16	0	0	0	27
Pennsylvania	1	1	4	0	3	34
Rhode Island	0	0	0	0	0	1
South Carolina	2	2	5	16	0	30
South Dakota	0	2	2	17	5	63
Tennessee	2	2	18	21	11	69
Texas	27	1	25	72	26	196
Utah	4	23	2	1	1	25
Vermont	0	0	2	0	0	11
Virginia	6	7	27	4	4	59
Washington	6	10	3	0	2	27
West Virginia	1	2	9	11	29	43
Wisconsin	6	2	7	0	6	51
Wyoming	0	12	0	0	0	21
All States	190	270	381	535	381	2,276

Source: All measures were calculated by ERS using data from the Bureau of Economic Analysis.

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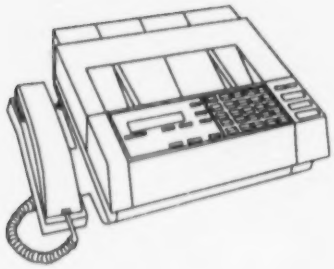

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